



# **REFERENCE**

ACCOUNTING PRINCIPLES



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TO MY FORMER TEACHER AND COLLEAGUE  
PROFESSOR H J DAVENPORT  
THIS BOOK IS AFFECTIONATELY DEDICATED

**REFERENCE**



## PREFACE

It has been the aim in the preparation of this book to present the principles of accounting in their relation to business management. An effort has been made to aid the reader in a ready grasp of the principles by the free use of illustrative solutions of problems and exercises. These illustrative solutions also serve a useful purpose in the teaching of good form in accounting work.

The business man, who lacks the time to work through tedious routine, will find that the illustrative forms and solutions which are presented in connection with the discussion of the principles will facilitate an understanding of the subjects discussed. He will also find that the text has many accounting forms and statement forms which will make it a useful reference volume.

The text is supplied both with special problems and exercises illustrating the principles of the separate chapters and with a set of business transactions designed to form the basis for a continuous set of books illustrative of accounting principles for a small individual business, a partnership, and a corporation. In the continuous set the student will have good discipline in opening the books, in transferring a business, and in arranging for a continuous routine such as may be involved in carrying forward a regular set of books. A more hasty reading of the book by one already trained in routine need not involve the more tedious work of the continuous set.

The exercise and problem material of the text have been developed during eight years of teaching of the Principles of Accounting. During five of these eight years the late Major J. E. Treleven was associated with the author in accounting instruction, and contributed much of the special problem

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# ACCOUNTING PRINCIPLES





# ACCOUNTING PRINCIPLES

## CHAPTER I

### THE BALANCE SHEET

1. **Property.** — The word *property* signifies things that are owned by an individual, a firm, or a corporation. These things may consist of houses, lands, stocks, bonds, mortgages, evidences of debt (such as open accounts and notes), franchises, goodwill, and other valuable rights — in short, of anything, either tangible or intangible, with which the owner would not ordinarily part without a consideration. Property is also frequently spoken of as *assets*. The assets of an individual, a firm, or a corporation, therefore, are all the property that each may own.

2. **The Business Unit.** — Much confusion will be saved if the student will from the beginning think of the ownership of property and of the conduct of a business in terms of the business itself, rather than in terms of the individuals who may derive certain benefits therefrom. The business, whether controlled by an individual, a firm, or a corporation, owns all the assets of the concern, and holds them subject to the claims of the proprietors and creditors. In fact, a business is frequently thought of as owing some one for all the assets that it may hold.

3. **The Individual Business Unit.** — The assets of a business controlled by an individual are not necessarily all owned by the particular individual, though they are, of course, all owned by the business itself. The individual may contribute all the assets of the business, in which case the business owes no one except the owner. His interest is ordinarily called the *proprietary interest* or *proprietorship*. Frequently, however, a business buys merchandise on credit from outside parties without giving to them any power of control over the business except

## ACCOUNTING PRINCIPLES

such as might accrue through nonpayment of the obligations due. Where such purchases are made, the business is indebted to the owner for his contribution of assets and to the outside parties for the merchandise bought. An individual may, therefore, be the owner of a controlling interest though not of all the assets of a business. A business is sometimes spoken of as an *enterprise*, and the owner of the controlling interest as the *enterpriser*.

The debts or liabilities of a business controlled by an individual are ordinarily paid, when due, by the business itself. Should the business be unable to meet its obligations at maturity, the owner must pay them out of other property or assets he may own, even though the business is indebted to him for the assets he has contributed to it. In other words, the debts of the business become the debts of the owner or enterpriser whenever the business is unable to pay them. Whenever all the assets are sold the cash proceeds must be applied first to pay all liability interests. The balance is then distributed to the proprietors on the basis of their proprietary interests.

**4. The Firm or Partnership.** — Whenever two or more individuals combine to secure the controlling interest in an enterprise under the terms of what may be called a *general partnership*, they each assume the same responsibility for the debts of the business that the single individual assumes for the debts of the individual business. The firm itself is initially responsible for its debts, but, if the business cannot pay them, the members of the firm or partnership are jointly and severally responsible and must meet the claims from other property or assets owned by them.

**5 The Limited Partnership.** — Many of the states have passed laws providing for the organization of *limited partnerships*, where the members are not responsible for all of the debts created by the firm. The rules and regulations under which such firms are organized vary, of course, in the several states.

**6. The Corporation.** — The corporation is the most convenient form of organization for securing a large amount of

assets under the control of a single business unit. A corporation ordinarily has shares of stock of a given par value, the ownership of more than half the shares giving control of the corporation. Although the stockholders have the power to control the business, they ordinarily vest this power in a board of directors. The board of directors in turn selects officers to conduct the business. The corporation, like other forms of business units, borrows money and buys assets on time. It is therefore indebted, not only to the stockholders for the funds they have invested, but frequently to outside parties for goods bought on credit and for money borrowed. The stockholders, however, do not become personally responsible for the debts of the corporation, except to the extent of their interest in its assets. The business itself is solely responsible for debts, and only its assets can be drawn on to pay the debts of the business in case they are not paid in the regular course of operation.

**7. Liabilities and Proprietorship** - The foregoing is a brief statement of the nature of business units, made for the purpose of throwing light on the meaning of *assets* and *liabilities*. The assets of a business unit, as indicated in the beginning, are the things owned.

The claims against assets are, then, divided into two classes or equities: (a) liabilities, and (b) proprietorship. The owners of these claims are the parties interested in the business unit. The owners of the proprietary interest control the property and supervise its operation so long as the business is able to comply with its contracts with the owners of liability claims. It is, however, frequently provided in the contract between the business and the holders of liability claims that the latter take control of the business if it fails to comply with its contract obligations to the owners of these liability interests.

It is common in accounting literature to see a general equation or general foundation principle laid down in the form of the statement that "the assets less liabilities equal proprietorship." Of course it is just as true that assets less proprietorship equal the liabilities. The reason that both of these generalities are true lies in the more fundamental fact that the total

## ACCOUNTING PRINCIPLES

of ownership in assets is equal to the total of assets, since both the ownership and the assets are expressed in terms of dollars. ~~No~~ assets are contributed to business under a system of private enterprise unless the contributor receives in exchange a claim against the assets equal to the valuation or price placed on the asset received by the business unit which receives it. Of course a business unit may receive certain assets and exchange therefor some other asset of equal value, but there arises no increase in assets by such an exchange. All increases in the total assets of a business are accompanied by a like increase in the outstanding claims against the assets, the increase taking the form of an increase in either the liability claims or in the proprietorship claims.

**8. Proprietorship** — In the case of the individual business the proprietorship claim is ordinarily spoken of as the capital of the proprietor. In the case of the partnership the proprietary interest consists of the ownership claims of the partners which are called their capitals. When an entirely new corporation is organized it begins ordinarily with a proprietary interest represented by the capital stock or capital shares of the owners. The par value of these shares is generally held to represent the investments of the proprietors in the business. If these shareholders turn over property to the corporation in payment for their interests, this property is frequently, in fact, worth less than may be indicated by the par value of the shares received by the proprietors in question. The laws of the various states generally require that only paid-up shares may be issued, but at the same time these states do not so interpret and administer these laws that one can feel assured that the par value of the shares issued always signifies the value of the investments originally made by the proprietors. Increases in the proprietary interest arising from ordinary business operations are added directly to capital in the case of the individual business and in the case of the partnership. \*The corporation does not increase the issue of capital shares except by special authorization of the directors. The ordinary increases in proprietorship of the corporation are recorded under the caption of

*surplus*, so that the entire interest of the proprietor is represented by the capital stock plus the surplus.

9. **Balance Sheet.** — A balance sheet is a statement of the assets and liabilities of a business. It may be illustrated for the several types of business units as follows

10. **The Balance Sheet of the Individual Business.** —

JOHN SMITH

BALANCE SHEET, DECEMBER 31, 1918

<i>Assets</i>		<i>Liabilities</i>	
Cash	\$5,400 00	Notes Payable — Bank	\$2,000 00
Notes Receivable	4,500 00	Accounts Payable	
Accounts Receivable		Valley Furn Co	2,500 00
John Jones	500 00	Rocky Mountain	
Ralph Reynor	300 00	Univ	500 00
C R Kenedy	275 00	Desk and Chair Co	1,500 00
Merchandise Inventory	10,000 00	Mortgage Payable	10,000 00
Buildings	7 500 00	John Smith, Capital	21,975 00
Land	10 000 00		
	<u>\$38,475 00</u>		<u>\$38,475 00</u>

11. **The Balance Sheet of the Partnership and the Corporation.** — If, in the foregoing statement, we should substitute for the item *John Smith, Capital*, \$21,975 00, the following items —

John Smith, Capital	\$10,975 00
John Randolph, Capital	11,000 00

we should have the balance sheet of the partnership firm of Smith and Randolph

If, for the same item, we should substitute the following items —

Capital Stock	\$20,000 00
Surplus	1,975 00

we should have the balance sheet of the corporation

It is evident, therefore, that there is no difference in the balance sheets of the various types of business organizations except in the form of the statement of the liability to the owners, or, if there is objection to calling the capital account a liability account, in the form of the statement of the *net worth* or *proprietorship interest*.

**12. The Financial Statement.** — Many accounting texts, in order to bring out clearly that the net worth or proprietorship interest of a business unit is always found by subtracting the outside liabilities from the total assets, adopt the financial statement form of setting forth the assets and liabilities. This form may be illustrated as follows

### JOHN SMITH

FINANCIAL STATEMENT, DECEMBER 31, 1918

#### *Assets, or Resources*

Cash		\$5,400 00	
Notes Receivable		4,500 00	
Accounts Receivable			
John Jones	\$500 00		
Ralph Reynor	300 00		
C R Kenedy	<u>275 00</u>	1,075 00	
Merchandise		10,000 00	
Buildings		7,500 00	
Land		<u>10,000 00</u>	
Total Assets			\$38,475 00

#### *Liabilities*

Notes Payable—Bank		2,000 00	
Accounts Payable			
Valley Furniture Co	\$2,500 00		
Rocky Mountain Univ	500 00		
Desk and Chair Co	<u>1,500 00</u>	\$4,500 00	
Mortgage Payable		<u>10,000 00</u>	
Total Liabilities			16,500 00
Net Worth (John Smith, Capital)			<u>\$21,975 00</u>

From this illustration, it is evident that, so far as the financial statement is employed, it serves mainly to emphasize that the net worth or proprietorship interest is the balance resulting from the subtraction of the outside liabilities from the total assets. The use of the balance sheet, however, for this purpose may be entirely defended on the ground that the balance of an account is usually set down as the last item, without any actual subtraction. Indeed, the balance sheet, and not the

financial statement, is the form commonly used in published financial exhibits

**13. The Order of the Statement of Assets and Liabilities in the Balance Sheet.** — For a merchandise concern, the usual order of assets and liabilities is that found in the balance sheet given above. This order is essentially for the benefit of the creditors, who are most interested on the one hand, in the cash items and the items currently turned into cash, and, on the other, in the items that must be met from month to month out of the proceeds of current operations. The capital item is usually placed last, being regarded as the balance of the investment of the owners in the enterprise.

This question of the order of items will recur as other statements are made from time to time.

**14. Grouping of Assets and Liabilities.** — It is not sufficient for all purposes to know simply the totals of assets, liabilities, and proprietorship. If John Smith had no liabilities and asked a bank loan of \$20,000 00, the bank would wish to know not merely the total assets but the character of the assets. How much of these assets could be readily turned into cash? How much of the assets will be sold in the next sixty to ninety days in the ordinary course of business? If the bank loan is to mature in ninety days, there must be in sight some source from which the funds are to be secured to liquidate the bank loan. If the borrowed funds themselves are to be used to purchase goods which will be sold within ninety days, the sale of the goods will furnish the funds to pay the loan. If the business had in addition other goods which will be sold, the security of the loan is further improved. The bank would consequently ask John Smith to present a balance sheet showing the assets which are to be turned into cash in the ordinary course of business. These assets are called the *current assets*.

The assets which are to be used regularly in connection with the business and were not purchased for sale are the *fixed assets*. They are not looked to as the source of the funds which may be used to pay current loans to banks and other creditors. They would be of particular significance in connec-



tion with long-time loans and are of some significance even in connection with short-time loans

There is another type of asset which is of the nature of a supply to be used up in current operation but not sold. These supplies are sometimes called *deferred expense* because they will become an expense as they are used up in regular operations. Other expenses paid in advance are likewise put in the same class of items. These items are not expected to be sold for cash, but their cost will generally be covered by the sale price of merchandise.

**15. Grouping of the Liabilities.** — If loans are to be made to a business which already has liabilities outstanding, these become at once an important consideration. It is dangerous to lend to a business which may be unable to meet any of its liabilities. Moreover, the ability of a business to pay a particular liability at maturity depends to some extent on the other liabilities which may be outstanding, and on the date of the maturity of these liabilities. It is, therefore, customary to classify the liabilities on the basis of the date of payment. If liabilities are to be paid out of the proceeds of sale and during the current fiscal period they are generally classified as *current liabilities*. Accounts payable and notes payable are current liabilities. The mortgage liabilities, the bond liabilities, and the notes having a long period to run are classified as fixed liabilities. It is also true of these liabilities that their ultimate payment is generally provided for either by provisions for gradual accumulation of an amount sufficient to pay the debt at maturity or by the issue of new notes, bonds, or liabilities, which will furnish the funds for the retirement of the old liabilities. These fixed liabilities are also frequently called *funded liabilities*. There are other classes of liabilities and also subdivisions of the proprietary interest which will be discussed in later chapters.

**16. Balance Sheet with Items Grouped.** — The following balance sheet of John Smith shows the items grouped so that the statement would serve the purpose of showing the credit position of the business:

# JOHN SMITH

BALANCE SHEET, DECEMBER 31, 1920

## THE BALANCE SHEET

<i>Assets</i>		<i>Liabilities and Proprietorship</i>	
<b>Current Assets</b>		<b>Current Liabilities</b>	
Cash		Notes Payable—Bank	\$2,000 00
Notes Receivable		Accts Payable	
Accts Receivable		Sample Furn Co	\$2,500 00
John Jones	\$500 00	Woodland Furn Co	500 00
Ralph Reynor	300 00	Desk and Chair Co	1 500 00
C R Kenedy	275 00		<u>4,500 00</u>
Merchandise			<u>6,500 00</u>
<b>Deferred Expense</b>		<b>Fixed Liabilities</b>	
Office Supplies		Mortgage Payable	10,000 00
Fuel Supplies			<u>10,000 00</u>
Insurance paid in advance			
<b>Fixed Assets</b>		<b>Proprietorship</b>	
Buildings		John Smith, Capital	<u>21,975 00</u>
Land			
<b>Total Assets</b>		<b>Total Liab and Proprietorship</b>	<b><u>\$38,475 00</u></b>

## ACCOUNTING PRINCIPLES

**17. Financial Statement.** — The balance sheet above is stated in the form of an account with assets appearing as debits, the liabilities as credits and the proprietorship as a balance of the account. This form of statement is easily read and interpreted by one who knows accounting, but the same facts can be indicated more plainly to a general reader by the financial statement form as follows

### JOHN SMITH

FINANCIAL STATEMENT, DECEMBER 31, 1920

#### *Assets*

<b>Current Assets</b>			
Cash		\$5,400 00	
Notes Receivable		4,500 00	
Accounts Receivable			
John Jones	\$500 00		
Ralph Reynor	300 00		
C R Kenedy	<u>275 00</u>	1,075 00	
Merchandise		10,000 00	
<b>Deferred Expense</b>			
Office Supplies	500 00		
Fuel Supplies	900 00		
Insur paid in adv	<u>100 00</u>	1,500 00	
<b>Fixed Assets</b>			
Buildings	6,000 00		
Land	<u>10,000 00</u>	<u>16 000 00</u>	
Total Assets			\$38,475 00

#### *Liabilities*

<b>Current Liabilities</b>			
Notes Payable—Bank		2,000 00	
Accounts Payable			
Valley Furn Co	2,500 00		
Rocky Mt Univ	500 00		
Desk and Chair Co	<u>1,500 00</u>	4,500 00	
<b>Fixed Liabilities</b>			
Mortgage Payable		<u>10,000 00</u>	
Total Liabilities			<u>16,500 00</u>
Net Worth (John Smith, Capital)			\$21,975 00

## PROBLEMS AND QUESTIONS

1 On the books of D. F. Payne, the owner of a general merchandise business, there appear the following items: notes payable, \$1500 00, accounts payable, \$200 00, buildings, \$4000 00, land, \$1600 00, horse and wagon, \$250 00, cash, \$3286 00, accounts receivable, \$1100 00.

(a) What is the capital account of D. F. Payne? (b) Arrange the items into a balance sheet as of December 31, 1919. (c) Arrange the items into a financial statement as of December 31, 1919.

2 In the balance sheet of John Smith as given in the text, cash was set down first, notes receivable, second, accounts receivable, third, merchandise, fourth, etc. Give the reason for this order.

3 Give the reason for the arrangement of the liabilities in the order found in the same balance sheet.

4 In the balance sheet of John Smith, which liabilities represent the probable source (a) of the merchandise inventory, (b) of the cash, (c) of the land and buildings?

5 In case of the dissolution of a business controlled by an individual or a partnership, as illustrated in the balance sheets of John Smith and of Smith and Randolph, under what condition would the owner or owners (a) get their investment of \$21,975 00 out of the business, (b) lose more than \$21,975 00?

6 In case of the liquidation or dissolution of the corporation illustrated in the text, with a capital stock of \$20,000 00 and a surplus of \$1975 00, what is the maximum amount that the shareholders stand to lose?

7 Make a balance sheet with items grouped from the data of question No. 1 above.

## CHAPTER II

### INCOMES AND EXPENSES

**1. Income Items.** — No income items are found in the balance sheet given in Chapter I. They represent increases in capital or proprietorship claims which have taken place in a period prior to the date of the balance sheet. Instead of simply adding all these increases in capital directly to the capital item, they are analyzed according to the sources from which the incomes are received. They arise mainly from the sale of merchandise. Merchandise consists of those goods which are bought to sell. At any particular time the total of these goods is called the merchandise inventory. The business is carried on mainly for the purpose of selling the merchandise at a price in excess of what it cost with a view to increasing the capital or the proprietorship interest.

The student frequently confuses the property or asset received with the name of the source from which the asset is received. Cash may be received from the sale of merchandise, but the name of the revenue item involved is merchandise sales. No asset or property item should be designated as an income item.

If a transaction takes place which increases one asset item and decreases another by the same amount, no income item is affected. For example, accounts receivable are paid from time to time by customers without affecting the total assets which a business owns. Cash is increased by exactly the same amount that accounts receivable are decreased.

Income may arise also from other sources such as rent of office space and perhaps from some business side line such as a repair shop. The income from such sources, however, is commonly small as compared with the income from sales. All of these incomes are alike in that they represent increases in what the business owns. They are increases in capital or proprietorship. They are not the actual assets in which these increases in ownership are embodied. These assets may be cash, ac-

## INCOMES AND EXPENSES

counts receivable, etc., but the revenue item is the name of the source from which the increase in assets was received. These income items are, of course, temporary items, since they are from time to time added in total to the capital and simply serve as an explanation of the sources from which the increase in capital was derived.

2. **Expenses.** — These incomes, however, are subject to certain deductions before the net is added to capital. The expenses are the cost which a business incurs in connection with getting its income. The purchase price of the goods sold represents a cost which must be deducted from sales before any net income could be added to capital. There are other deductions such as salaries of the sales force, the salaries of the administrative force, the expense of advertising, the expense of stationery and printing, etc. When all of the expenses thus incurred have been deducted from the incomes received, the balance is added to capital as an increase in capital or in the proprietorship interest.

It is to be noted that the expenses are simply the classified names of the causes of expense. They are not the names of the property items which the business may sacrifice in getting the net profit which is added to capital. The business may part with cash when it pays for goods purchased, but merchandise purchases represents the expense item which must be deducted from the merchandise sales by reason of this sacrifice of cash.

Expenses are deductions from capital or proprietorship. Instead, however, of adding incomes to capital and deducting expenses from capital, the expenses are commonly deducted from the income so as to get a net profit, which is added to capital. If the expenses were greater than the income, the business would be operating at a loss, and the loss would be deducted from capital or the proprietorship interest.

Instead of deducting all expenses in a lump sum from the total of income in the calculation of net profit, a number of sub-totals are derived showing what is left of the income after certain classes of expenses have been deducted. The statement formulated in connection with the calculation of these

sub-totals is called a Revenue Statement, or a Profit and Loss Statement

**3. Merchandising Differentials.** — The purchase price of the goods plus the freight and other charges incurred in transporting them to the place of sale is called the *cost of the goods*. The difference between the total proceeds of the sale of the goods and the cost of the goods sold is called the *gross profits*. If from the gross profits are subtracted the operating expenses, there remains a balance ordinarily called the *profits from operation*.

The operating expenses of a business include every loss and expense in connection with the sale of its goods and the conduct of the business organization. The money paid for rent, the salaries of those engaged in buying and selling, the salaries of those who keep the records, and the salaries of those who manage the business are all parts of the operating expenses. In other words, these payments are not made for assets which remain with the business, but are absorbed in disposing of goods which have been bought for sale. In buying and selling goods, therefore, the manager always strives to make the profits from operation as large as he can. He keeps a close record of operating expenses, in order to make such expenses as small as possible. Operating expenses are sometimes classified into *selling expenses*, *administrative expenses*, *general expenses*, etc. The larger the business, the more numerous the classes of operating expense.

Interest on funds borrowed to carry on a business is not ordinarily classed with operating expenses, but is carried in a special section of the revenue statement. Interest represents an earning or income to at least a part of those who hold definite liability claims against the assets, whereas operating expenses proper do not represent any part of the earnings of a business that can be distributed to holders of claims against the assets. In other words, operating expenses are not payments for the use of the funds which the business owns.

Moneys received from subsidiary enterprises are also treated in a separate section of the revenue statement, designated as *Other Income*. Profits from operation plus other income constitute the *total income*, which represents the entire earnings of the business.

on the total assets invested. The difference between the total income and the interest charges represents the earnings of the proprietors or stockholders, or the net profits of the business.

**4. Deriving the Revenue Statement and the Balance Sheet from a List of Items.** — The balance sheet shows the property items which a business owns at the end of a period, and the liability and proprietorship items for which the business is indebted at the same time. The revenue statement shows in an orderly way the incomes and expenses for the period with the net profits which were added to the capital of the beginning of the period in arriving at the capital shown in the balance sheet for the end of the period. Let us take the following list of items and derive therefrom a revenue statement and balance sheet for John Smith for the year ending December 31, 1918.

LIST OF ASSETS AND EXPENSES, INCOME AND LIABILITIES, FOR JOHN SMITH

YEAR ENDING DECEMBER 31, 1918

	ASSET AND EXPENSE ITEMS	LIABILITY AND INCOME ITEMS
Cash	5,000 00	
Accounts Receivable	4,500 00	
Office Furniture	1,200 00	
Notes Payable		2,500 00
Accounts Payable		6,500 00
John Smith, Capital		14,550 00
Gross Sales		20,000 00
Returns and Allowances on Sales	500 00	
Interest Received on Securities Held		250 00
Rent Received from Tenant of Store		100 00
Discounts on Purchases		125 00
Merchandise Inventory, 1st of Period	5,000 00	
Merchandise Purchases	22,000 00	
Returns and Allowances on Purchases		400 00
Salaries	5,000 00	
Advertising	200 00	
Rent	500 00	
Taxes	150 00	
General Expense	200 00	
Interest Paid	75 00	
Discounts on Sales	150 00	
	44,475 00	44,475 00



Merchandise Inventory, End of Period, \$18,600 00

### JOHN SMITH

#### REVENUE STATEMENT FOR YEAR ENDING DECEMBER 31, 1918

Gross Sales	\$20,000 00	
Less Returns and Allowances on Sales		
	<u>500 00</u>	\$19,500 00

Merchandise Inventory, 1st of Period	\$5,000 00	
Merchandise Purchases	\$22,000 00	
Less Returns and Allowances on Pur	<u>400 00</u>	<u>21,600 00</u>
		26 600 00

Deduct		
Merchandise Inventory, End of Period	<u>18,600 00</u>	
Cost of Goods Sold		<u>8,000 00</u>
Gross Profits		11,500 00

Operating Expenses		
Salaries	5,000 00	
Advertising	200 00	
Rent	500 00	
Taxes	150 00	
General Expense	<u>200 00</u>	<u>6,050 00</u>
Net Profits from Operation		5,450 00

Other Income		
Interest on Securities Held	250 00	
Rent from Tenant of Store Building	150 00	
Discount on Purchases	<u>125 00</u>	<u>525 00</u>
Total Income		5,975 00

Deductions from Income		
Interest	75 00	
Discount on Sales	<u>150 00</u>	<u>225 00</u>
Net Profits		\$5,750 00

## JOHN SMITH

## BALANCE SHEET, DECEMBER 31, 1918

<i>Assets</i>		<i>Liabilities and Proprietorship</i>	
Cash	\$5,000 00	Notes Payable	\$2,500 00
Accounts Receivable	4,500 00	Accounts Payable	6,500 00
Merchandise Inven- tory	18,600 00	Proprietorship	
Office Furniture	1,200 00	John Smith, Capital	20,300 00
	<hr/>		<hr/>
	300 00		\$29,300 00

If John Smith's capital of \$20,300 00 at the end of the period be compared with the capital of \$14,550 00 as found in the Trial Balance it will be observed that the \$5750.00 of net profits are added to the original capital item to produce the final capital of \$20,300 00. One of the purposes of the revenue statement is to show the calculation of the net profit item to be added to capital before the balance sheet is made.

It is to be noted that the gross sales item is not an asset although \$20,000 00 in assets come into the business in connection with the \$20,000 00 of sales. The item of gross sales bears a relation to these assets similar to that which the capital item bears to cash when the owner of the business invests \$10,000 00 of cash. The gross sales are the source from which the assets are received. The items which follow gross sales show the deductions which must be made before the net profit can be derived and added to the capital of John Smith at the beginning of the period. The net profit of \$5750 00 represents an earning of  $39\frac{1}{2}\%$  on the capital of John Smith at the beginning of the period. It represents an earning of  $19\frac{1}{2}\%$  on the total assets as they stood at the end of the period.

**5. The Use of the Revenue Statement.** — Business is carried on by the owners mainly for the net profits to be made, these net profits representing the net results of business operations so far as the owners are concerned. These net profits may be added to the investment of the owners, or withdrawn from the business for other uses. If left in the business, the

net profits produce an increase of capital in the individual or partnership business and an increase of surplus in the corporate form.

The revenue statement serves to show to the owners the profits that have been made during a particular period and the character of the operations that have produced these results. The data in regard to expenses furnish information that is extremely useful to the manager in making future plans. He knows what services have been secured through the expense outlays, and will strive to secure the same service at a lower cost or better service for the same cost. An analysis of expenses, therefore, provides a basis for the formulation of a business program for the succeeding period.

Similarly, an analysis of the gross profits is useful to the manager in the determination of his future selling policy. During the last period, the gross profits have been a certain per cent of sales, and the total income a certain per cent of the total assets. If this return on the total investment is unsatisfactory, the manager will strive to secure a larger gross profit from sales, so as to increase the total income.

The owners of a business, of course, are mainly interested in making the net profits as large a percentage as possible of their own capital investment. If this return is unsatisfactory, the owners will either endeavor to increase the net earnings or transfer their investment to some other enterprise in which larger financial returns may be secured.

**6. Complications and Omissions.** — From the foregoing statement, there have been purposely omitted the many complications arising in connection with its construction. These will be considered in their due order. Likewise, there has been postponed a consideration of many of the uses of the revenue statement in connection with the balance sheet. The statement as presented will suffice for an introductory treatment of the principles of double-entry bookkeeping and accounting.

## PROBLEMS AND QUESTIONS

1 In the following statement, the items in the first column are either expenses or assets, the items in the second column are income, liabilities, and proprietorship. From these items, make out a revenue statement and a balance sheet.

In solving this problem, make out the revenue statement first, add the net profits to the capital, and then make out the balance sheet.

To find the cost of the goods sold, to be deducted from sales to ascertain the gross profits, deduct the merchandise on hand from the purchases.

JUNE 30, 1919

	ASSETS AND EXPENSES	LIABILITIES, INCOME AND PROPRIETORSHIP
Cash	\$12,257 35	
Notes Receivable	588 00	
Accounts Receivable	800 00	
Furniture and Fixtures	1,175 00	
Notes Payable		\$7,250 00
Accounts Payable		3,150 00
J C Kenedy, Capital		11,000 00
Sales		12,025 50
Discount on Purchases		228 20
Purchases	17,000 00	
Expenses	1,641 00	
Discount on Sales	132 00	
Interest	60 35	
	\$33,653 70	\$33,653 70

Merchandise on hand June 30, \$9074 50

2 What does the revenue statement in Problem 1 show to have been earned (a) on total assets at the beginning of the period, (b) on capital at the beginning of the period?

3 What per cent of sales are the gross profits of Problem 1? Of what value is this information to the manager or the owner of the business?

4 Explain the difference between balance sheet and revenue items.

5 From the following statement, make out a revenue statement and a balance sheet, as in Problem 1.

Make out the revenue statement first, add half of the net profits to the capital item of William Henderson and half to the capital item of John Perry, and then make out the balance sheet, showing the assets, liabilities and proprietorship.

APRIL 1, 1912—MARCH 30, 1913

	ASSETS AND EXPENSES	LIABILITIES, INCOME AND PROPRIETORSHIP
Cash	\$4,376 50	
Notes Receivable	4,000 00	
Accounts Receivable	7,000 00	
Office Furniture	1,350 00	
Notes Payable		2,500 00
Accounts Payable		3,800 00
William Henderson, Capital		4,800 00
John Perry, Capital		5,000 00
Sales		31,181 50
Sales Returns	400 00	
Discount on Purchases		180 00
Merch Inv, First of Period	2,500 00	
Purchases	18,000 00	
Returned Purchases		325 00
Rent	1,200 00	
Selling Expenses — Office	2,000 00	
General Expense	3,600 00	
Salesmen's Salaries	2,000 00	
Salaries — Office	1,300 00	
Interest — Discount on Notes	60 00	
	\$47,786 50	\$47,786 50

Merchandise on hand March 30, 1913, \$6,280 00

6 Suppose that instead of the two items of William Henderson, Capital, and John Perry, Capital, there was one item of Capital Stock, \$9,800 00; how would the proprietorship item appear in the balance sheet?

## CHAPTER III

### THE ACCOUNTS AND THEIR RELATION TO THE STATEMENT

**1. Relation of Accounts to Statements** — The balance sheet and the revenue statement given in Chapter II contain the items most frequently used as the names of accounts in double-entry bookkeeping. The amount of property represented at any time by an asset item or asset account is called the balance of the account. Likewise, the amount of liability represented at any time by a liability item or liability account is called the balance of the account. The same definition holds true for the income and the expense items. Their amounts at a particular time represent the balances of the accounts by the same names as the names of the items.

**2. Periods Covered by Accounts.** — Whenever it becomes desirable to make a revenue statement or a balance sheet, it is necessary to calculate new balances for the accounts. These new balances, in the case of asset and liability accounts, show what the business unit owns and owes at the time the balances are taken. In the case of the revenue accounts, they show what the income and the expenses have been during the period covered by the accounts. After a balance sheet and a revenue statement have been made, the accounts are reopened, and a new period of operation is begun. The time elapsing between the opening and closing of the accounts represents the period covered by the revenue statement, as well as the period covered by the various accounts.

**3. Transactions and Balance Changes.** — In double-entry bookkeeping, each transaction changes the balance of at least two accounts. In describing an account, however, it is simpler to point out how a particular transaction affects it, without noting how some other account is affected at the same time. Let us, therefore, take some of the simpler accounts.

4. **Customer Accounts, or Accounts Receivable.** — The customer accounts arise from the sale of goods to customers on time. When an article is sold to a customer on credit, he becomes indebted to the business, and his account is debited. When the customer pays any or all of the debt, his account is credited with the amount of the debt thus canceled. In other words, the account is debited when a transaction arises to increase the net amount of the debt, and is credited when a transaction arises to decrease the net amount of this indebtedness. The debit balance, therefore, is the balance of the debt still unpaid, and may be found by subtracting the total credits from the total debits, as indicated in Illustration No 1, below. All debit items are placed on the left side of the account and all credit items are placed on the right. All asset balances are debit balances by definition and all liability and proprietorship balances are credit balances by definition.

ILLUSTRATION NO 1  
AN ACCOUNT WITH A CUSTOMER  
JOHN SMITH

1918					1918				
Jan	1		350 00		Jan	5		a 38 00	
	2		75 00			6		350 00	
	3		28 75			7		a 34 25	
		103 75						423 25	
	4	2/10, n/30	272 25			10	Balance <sup>1</sup>	103 75	
			526 00					526 00	
			526 00					526 00	
Jan.	11	Balance	103 75		Jan	15		103 75	

1918

- Jan 1 Sold to John Smith merchandise amounting to \$350 00.  
 2 Sold on account merchandise amounting to \$75.00  
 3 Sold on account merchandise amounting to \$28 75  
 4 Sold on 30 days' time, 2% 10 days, merchandise amounting to \$72 25

<sup>1</sup> The whole line is written in red ink. Throughout the book black-face type in accounts represents red ink.

Memoranda of cash discounts should be inserted in the memorandum space, as in Illustration No 1.

- Jan 5 Received on account of bill of Jan , \$38 00  
The fact that the receipt of Jan 5 is to be applied to the sale of Jan 4 is indicated by inserting the same small letter before both items, as in Illustration No 1
- 6 Received on account, \$350 00
- 7 Received on account the balance of the bill of Jan 4, \$34 25
- 8 Bill is sent to the customer for \$103 75  
No entry is made of this action, but the debit balance is entered in small pencil figures to the left of the last debit item
- 5 Received \$102 30 in full settlement of the account, \$1 25 being allowed as a discount  
A single red line is drawn under the debits and credits after the transaction is entered, thus indicating that the account was settled on Jan 15

The name of the customer is written at the head of the account, and becomes the name of the account. The total of the debits is set down in small pencil figures below the last debit, and the total of the credits in like manner below the last credit. Since the debits are usually greater than the credits, the balance of the account is ordinarily a debit balance, and is written in small pencil figures to the left of the last debit item. If the customer should overpay his account, the credits would be greater than the debits, and the balance of the account, which in such an instance would be a credit balance, would be initially entered in the same manner as the debit balance to the left of the last credit item.

### EXERCISE NO 1

JOHN KING

On a sheet of ledger paper, prepare an account for John King similar to that prepared for John Smith in Illustration No 1. Ledger paper has a ruling like the ruling in Illustration No 1.

1918

- Feb 1 Balance due from John King, \$85 25  
The balance of a debt used in opening an account is entered on the debit side, just as the amount of each transaction increasing the debt.
- 2 Sold on account merchandise amounting to \$45 30



- Feb 3 Allowed a credit of \$2 00 for damaged goods  
 4 Received \$85 25 in payment of the balance due at the beginning of the month  
 5 Sold on account merchandise amounting to \$35.75  
 6 Received a note for \$79 05 in settlement of balance of account
- A note is treated as cash in making credits to a customer's account. It is true that the customer still owes the amount of the note, but the record of the debt is made in the account *Notes Receivable*, to be explained later.
- When an account is settled prior to the date of closing the books, a red line is drawn underneath the last debit and the last credit item, thus indicating that the account was balanced on the particular date.
- 7 Sold on 30 days' time, 2% 10 days, goods amounting to \$75 50, and charged \$1 25 for drayage  
 8 Sold on account merchandise amounting to \$20 00, and received on account poultry valued at \$2 50  
 9 Received payment for the goods sold on the 7th, less the discount  
 10 Calculated the balance due, sent out bill, and closed the account  
 15 Received the amount of the bill rendered

#### SUMMARY OF ACCOUNTS WITH CUSTOMERS

<i>Debit Customers</i>	<i>Credit Customers</i>
1 For the amount due at the time of opening the account	4 For all cash paid on account
2 For the price of all goods sold on time	5 For all notes given to apply on account
3 For all sundry charges, such as freight, drayage, etc	6 For all allowances made for damages, shortages, defective goods, etc
	7 For all cash discounts allowed
	8 For the balance of the account when it is decided to be uncollectible or the account is closed

The detailed description of the customer accounts is intended to show the form in which the record of the changes in the balances is kept. The principle involved, however, may be stated very simply. The customer accounts are property or asset accounts. Consequently, the balances are debit balances.

until they begin to show, not the amount of this form of property that the business owns, but the amount that the business owes. If a transaction with a customer increases his debt or the original debit balance, his account is debited with the amount of this increase. If the transaction decreases his debt, his account is credited with the amount of the decrease. Thus, the account becomes a record of the changes in the initial balance of the account, the first transaction or the opening entry representing this initial balance.

**5. Cash Accounts.** — The meaning of debits and credits in the cash account is essentially the same as the meaning of these terms in the customer accounts described above, although the idea of debt does not enter into the cash account. Cash is, of course, an asset account. When cash is received, the amount of this asset is increased, and the account is debited. When cash is paid out, this particular asset is decreased, and the account is credited. In other words, cash sales increase, whereas cash outlays decrease, the cash asset.

Since the cash account is an asset account, the balance is a debit balance, and shows the amount of cash on hand. In common with other asset balances, the cash balance is required if a balance sheet is to be made showing the condition of the business.

### ILLUSTRATION NO. 2

#### THE CASH ACCOUNT

##### CASH

1918					1918				
Jan	1			5000 00	Jan	2			50 00
	4	4454 50		225 00		3			350 00
				5225 00		5			85 00
						6			250 00
						7			35 50
									770 50
							Balance		4454 50
				5225 00					5225 00
Jan	9	Balance		4454 50					

1918

- Jan    1    J. R. Wall invests in business \$5,000 00  
       2    The business paid \$50 00 for rent  
       3    Paid \$350 00 for merchandise  
       4    Received \$225 00 for merchandise cash sales  
       5    Purchased coal for \$85 00 cash  
       6    Paid \$250 00 to J. R. Smith  
       7    Paid sundry expenses amounting to \$35 50

## EXERCISE NO. 2

1918

- Feb    1    C. H. Johnson invested \$3500 00 in business  
       2    Paid for rent, \$75 00, for salaries, \$65 00  
       3    Received on a note, \$2500 00  
       4    Purchased goods for \$750 00 cash  
       5    Received \$3500 00 for cash sales  
       6    Paid C. R. Rendles check for \$250 00  
       7    Balanced and closed the account

**6. Other Asset Accounts.** — If the principle of debits and credits for property or asset accounts is fully understood from the customer and cash accounts, it is hardly worth while to discuss in detail the other property accounts. It is clear, for example, that a purchase of furniture and fixtures would increase the amount of this form of property, and should consequently be debited to the account. If an item of furniture and fixtures is removed or destroyed, however, the balance of the account would be decreased by the cost of the item, and the account should be credited by that amount. The various complications that frequently arise in connection with property accounts need not concern us for the present.

**7. Creditor Accounts, or Accounts Payable.** — Creditor accounts are kept by a business with those from whom purchases are made. The buying of goods on time from an outside party results in a credit to the one from whom the goods are received, just as in the case of the payment by an individual of cash on his account. The payment, on the other hand, by the business to the creditor of all or part of the obligation incurred results in a debit to the account. In other words, the creditor is credited for the price of the goods turned over to the business, and is debited for all payments by the business for the goods received.

The balance of a creditor account is generally a credit balance, and is therefore initially entered in small pencil figures to the left of the last credit item

ILLUSTRATION NO 3

AN ACCOUNT WITH A CREDITOR

HAYWOOD BROS

1918			1918		
Jan	300 00		Jan	425 00	
	225 00		/10	225 00	
Note \$125	125 00			650 00	
30 days	650 00			350 00	
Balance	365 00		365 00	15 00	
	1015 00			1015 00	

- 1918
- Jan 1 Bought of Haywood Bros goods amounting to \$425 00
- 2 Bought merchandise amounting to \$225 00, 2% 10 days
- 3 Paid on invoice of Jan 1, \$300 00
- 4 Paid invoice of Jan 2, taking the discount
- 5 Settled balance of bill of Jan 1 by note for \$125, 30 days
- 6 Bought merchandise to the amount of \$350 00, Haywood Bros agreeing to advance the freight Bill rendered for freight charges, \$15 00
- 7 Calculated balance due to verify bill received, and closed the account

EXERCISE NO 3

KIDDER & MORSE

On a sheet of ledger paper, prepare an account for Kidder & Morse similar to that prepared for Haywood Bros in Illustration No 3

- 1918
- Mar 1 Balance due Kidder & Morse, \$455 20
- 2 Bought on 30 days' time goods amounting to \$225 00
- 3 Bought on 30 days' time, 3% 10 days, goods amounting to \$130 00
- 4 Paid invoice of \$235 00 and freight of \$40.50, the latter being charged to their account

- Mar 5 Paid invoice of Mar 3, less the discount  
 6 Gave a 30-day note for the balance of the account  
 7 Bought merchandise to the amount of \$325 00  
 8 Received allowance of \$25 00 for damaged goods  
 9 Paid on account, \$125 00, and closed the account

## SUMMARY OF ACCOUNTS WITH CREDITORS

*Debit Creditors*

- 1 For all cash paid them on account
- 2 For all notes given them on account
- 3 For all rebates allowed by them on account
- 4 For all freight charges paid on goods to be delivered f o b destination
- 5 For all cash discounts

*Credit Creditors*

- 6 For amount due them at the time of opening the account
- 7 For the price of all merchandise bought on time

As in the case of the customer accounts, a rather detailed description of the creditor accounts is necessary to illustrate correct form and the operation of the principle involved. The principle itself may, however, be very briefly stated. A creditor account is a liability account, and the balance is, therefore, a credit balance so long as the account remains a liability account. In other words, the balance shows what the business owes rather than what it owns. If a transaction increases the amount due the creditor, the account is credited with the amount of such increase. If a transaction results in decreasing the amount due the creditor, the account is debited with the amount of such decrease. The purpose of the account is so to record the items affecting it that the balance due the creditor may be found at any time, for no balance sheet showing the condition of the business can be made unless the liabilities are correctly stated.

**8. Other Liability Accounts.** — The foregoing discussion and illustrations lead to a statement of the basic assumption of double-entry bookkeeping. This assumption is that assets or asset balances are debit balances and that liabilities or liability balances together with proprietorship balances are credit bal-

ances, with an initial equality of debits and credits, since assets equal the liabilities plus proprietorship. The other principles of debit and credit follow as a matter of course, the rest of double-entry bookkeeping being concerned largely with a proper record of the changes in the asset, liability and proprietorship balances.

The reason for designating as credits the debts a business owes to its creditors is probably found in the application of the term *good credit* to the ability of a business to buy on time. If the credit balance of one liability is designated as a credit, it follows in a general system of debits and credits that other liability balances should also be designated as credits. Inasmuch as assets are the opposite of liabilities from the standpoint of business ownership, asset balances must, of course, be debit balances.

**9. Revenue Accounts.** — The general principle of debits and credits applies also to the revenue accounts, which involve both expense and income accounts. All income items result in an increase of capital or proprietorship interest, and are therefore credits to the capital account. For the purpose of simplifying the appearance of the capital account, however, the income and expense accounts are kept separately, and finally closed into the profit and loss account, which serves as a temporary capital account. The profit and loss balance is eventually carried to the permanent capital account as a debit or credit balance.

The revenue accounts, the profit and loss account, and the capital account will be considered further after a discussion of the merchandise account.

**10. The Merchandise Account.** — At first thought, this account may seem an ordinary property account. The purchase of merchandise results in an increase in the amount of this form of property, and is therefore a debit to the merchandise account. The sale of merchandise, on the other hand, results in a decrease in the amount of goods on hand, and is therefore a credit to the merchandise account. The general principle of debits and credits applies, then, just as in the cash account.

There are two fundamental differences, however, between the

merchandise account and the other asset accounts. (1) Merchandise is ordinarily not sold at the purchase price; consequently, a subtraction of the credits from the debits does not show the balance of merchandise on hand. (2) A gain is made when goods are sold above cost, resulting in an increase of the capital or proprietorship interest of the owners, consequently, a record should be made to show the obligation. It is necessary, therefore, for the merchandise account to show two balances, one being the balance of merchandise on hand, the other the gain on merchandise. The merchandise balance is always the opening balance of the merchandise account for the succeeding period, while the gain on merchandise is carried to the credit of profit and loss, which has already been described as a temporary capital account.

These balances can be readily secured, the first by listing at cost the unsold items of merchandise, the second by using the first in connection with the debits and credits to the merchandise account. The total of the debits to merchandise represents the cost of the goods on hand at the beginning of the period plus the cost of purchases made during the period. If from this total there is subtracted the cost value of the merchandise on hand, the difference represents the *cost of the goods sold*. If we now regard the cost of the goods sold as the total debits and sales as the total credits, the credit balance discloses the *gain on merchandise*.

The same result is secured more conveniently, however, by taking credit in the merchandise account for the merchandise on hand, or the *merchandise inventory* at the end of the period. The credits then become the sales at the sale price and the cost value of the goods on hand at the close of the period. The debits become, as formerly, the cost of the merchandise on hand at the beginning of the period, the cost of the purchases made during the period, and the balance again represents the gain on merchandise. The merchandise inventory is entered in red on the credit side of the account as the debit balance, and is brought down as the beginning balance for a new period. The gain on merchandise is entered as a credit balance on the

debit side of the account, the entry being in red if the account is not closed through the journal, but in black if the account is closed, as is ordinarily done, through a journal entry. This matter of closing will be discussed later on.

Because of the presence of the two balances indicated above, the one a debit or asset balance, the other a credit or proprietorship balance, the merchandise is frequently called a mixed account, or a mixture between an asset and a proprietorship account

ILLUSTRATION NO 4  
THE MERCHANDISE ACCOUNT  
MERCHANDISE

1918 Jan	2		77 30	1918 Jan	4		14 25
	3		134 95		6		30 00
	5		192 00		8		57 35
	10		228 60		11		54 25
	15		246 00		13		40 00
	17		28 00				52 40
	23		197 10		16		49 40
	27		172 75		10		42 30
	31	Gross Profit	1276 70 262 81		22		50 00
							24 05
					25		80 05
					26		78 25
					27		42 25
							42 50
							657 05
					31	Bal -Inv	882 46
			1539 51				1539 51
			1539 51				1539 51
Feb	1	Inventory	882 46				



1918

- Jan 2 Bought from Benson & Co on account merchandise amounting to \$77 30
- 3 Bought from Reynolds Bros on account merchandise to the amount of \$134 95
- 4 Sold to B C Judson on account merchandise of the value of \$14 25
- 5 Bought from the Valley Flour Company for cash merchandise amounting to \$192 00
- 6 Cash sales of merchandise, \$30 00
- 8 Sold to Adolph Hudson on account goods amounting to \$57 35
- 10 Bought from J D Lowrey merchandise to the amount of \$228 60
- 11 Sold to B C Judson merchandise amounting to \$54 25
- 13 Cash sales of merchandise, \$40 00, sold to R E Johns goods to the amount of \$52 40
- 15 Bought from Benson & Co merchandise to the amount of \$246 00
- 16 Sold to E R Hutchins merchandise amounting to \$49 40
- 17 Bought from the Model Creamery merchandise amounting to \$28 00
- 19 Sold to A C Williams merchandise amounting to \$42 30
- 22 Cash sales of merchandise, \$50 00, sold to R G Mathews merchandise to the amount of \$24 05
- 23 Bought from J A Smith goods amounting to \$197 10
- 25 Sold to E R Hutchins on account merchandise amounting to \$80 05
- 26 Sold to C L White on account goods to the amount of \$78 25
- 27 Bought from Benson & Co on account merchandise amounting to \$172 75, sold to B C Judson on account goods to the amount of \$42 25, cash sales, \$42 50
- 31 Inventory of goods on hand, \$882 64

**11. Profit and Loss Account.** — This account is discussed before the capital account because it is what may be termed the temporary capital account. By means of it, all the operating charges and credits to capital are gathered together, so that only the balance of loss or gain for a given period may go to the debit or credit of the capital account. The profit and loss account is, consequently, a proprietorship account. It differs from the capital account only in that the net balance, called net

profits, shows what the business is due the owners for a particular period of operation, whereas the capital account shows the total obligation of the business to the owners.

Although temporary in nature, the profit and loss account does not contain a detailed record of operating charges and credits. These charges and credits are much more advantageously kept in separate accounts. It is extremely important that the manager of the business know not only the total income and the total expense, but the amount of the various classes of each. By means of such information, new selling plans may be formulated and excessive expense in any particular direction may be reduced. At the end of the operating period, the accounts are closed, and the totals of the expense accounts and the totals of the income accounts are carried over to profit and loss, the former as debit and the latter as credit balances.

Few explanations are inserted in the ordinary account to show how the items arose. This is not true, however, of the profit and loss account. The names of all expense accounts, as well as the names of all income accounts, that are closed into profit and loss are placed opposite the balances of these accounts as they appear in profit and loss. The most common income accounts are gain from merchandise, interest received, rent received, income from outside operations, and miscellaneous income. The classes of operating expense have already been indicated in the previous chapter. (See p. 41.)

**12. Capital Account** — The principles of debit and credit described for the profit and loss account apply also to the capital account, the credit balance of which at the beginning of a period represents the investment or proprietorship interest of the owners at that time. Instead of being credited or debited directly to the capital account, subsequent increases or decreases in this investment or proprietorship interest are closed out first into profit and loss. At the end of the period, the net balance of the profit and loss is credited to the capital account if the account shows a credit balance or net profit. If the account shows a debit balance or loss, it is carried to the debit of the capital account.

There are sometimes, however, exceptional items of gain or loss, such as profits arising from the sale of the premises on which the business is carried on, or losses from fire and other like causes. Such exceptional items are closed out directly into the capital account. By thus eliminating from profit and loss the exceptional items of gain or loss, the balance of the account is made to show the profit or loss from the regular operations of the business. One can then compare the profits of one period with those of another and reach a fair conclusion as to whether the business is more successfully conducted in any period than it was in a preceding period. Occasionally, there are also corrections resulting from readjustments in asset values. Changes in proprietorship interest from these sources are first charged or credited to an adjustment account, which in turn is closed into capital, instead of into profit and loss. (See p. 41.)

**13. Personal Account.** — In an individual or partnership business, money and goods are frequently withdrawn by the owner or owners for personal use. Such withdrawals decrease, of course, the capital investment, and consequently become a debit to the capital account. The items are, however, first recorded in a separate personal account, and closed into the capital account when a balance sheet or revenue statement is made. Payment of a part or all of the debt at any time before the closing of the personal account becomes a credit to the account, the net balance representing the amount of capital investment withdrawn during the period under consideration. If the net balance should perchance be a credit balance, it becomes a credit to the capital account. Ordinarily, the balance is a debit balance, and becomes a charge against the capital or proprietorship interest of the business. (See p. 40.)

**14. Accounts Affected by a Transaction.** — From the standpoint of debits and credits, there are two classes of accounts, assets and claims against assets, or things which the business owns and things which it owes to the holders of liabilities and the owners of the proprietary interest. Moreover, in the beginning there is an equality of debits and credits, the total of the things owned being equal to the total of the things owed.

Subsequent business exchanges result in a readjustment of the various debits and credits, but do not affect the equality of their totals. Thus, an exchange of cash for merchandise results in an increase in one form of property and in an equal decrease in another form. Merchandise is debited and cash is credited, and the total asset balances remain, not only unchanged, but equal to the total liability and proprietorship balances. If a business buys merchandise on time, merchandise is debited and the account of the creditor is credited. In other words, the merchandise balance is increased, and the total of creditor accounts is increased by the same amount. The asset balances and the liability balances have, therefore, been increased by an equal amount, without in any wise disturbing the equality of total debits and total credits. If a business pays cash to a creditor, the balance of cash and the balance of the creditor account are both decreased by the same amount. The net result is an equal decrease in the total asset balances and in the total of liability and proprietary balances, the equality of the totals being unaffected. If a business settles an account with a note, one liability account is decreased and another liability account is increased by a corresponding amount. In other words, the total of accounts payable and notes payable remains unchanged, and the equality of asset balances and liability balances is still maintained.

These illustrations are examples of the possible combinations growing out of the various types of transactions. These combinations may be diagrammatically represented as follows:

- (1) Increase in an asset balance — Increase in a liability or proprietorship balance  

(Debit)
(Credit)
- (2) Increase in an asset balance — Decrease in an asset balance  

(Debit)
(Credit)
- (3) Decrease in a liability or proprietorship balance — Decrease in an asset balance  

(Debit)
(Credit)
- (4) Decrease in a liability or proprietorship balance — Increase in a liability or proprietorship balance  

(Debit)
(Credit)

These combinations follow as a matter of course from the original assumption that assets shall be debit balances and that liabilities and proprietorship items shall be credit balances. In other words, there can be no greater total of things owned than that of ownership claims against them, and no transaction can arise to change the balances of things owned without at the same time producing an equal opposite change in the balances of things owed.

**15. The Trial Balance** — In order to test the equality of assets and liabilities, a trial balance of all accounts is periodically made. In taking a trial balance, the accounts are first listed in the same order in which they stand in the account record. The debit balances are then set down opposite the appropriate accounts in one column, while the credit balances are set down in the same way in a second column to the right of the previous one. Since the total debit balances should always equal the total credit balances, the total of the first column should equal the total of the second column. A difference in the footings indicates that an error has been made.

The trial balance is commonly taken before the revenue accounts are closed into profit and loss. If taken again after the revenue accounts have been closed into profit and loss, and profit and loss has been closed into the capital account, the two columns of the trial balance represent the assets on the one side and the liabilities and proprietorship on the other. Instead of a second or post closing trial balance, a revenue statement and balance sheet are usually made after the closing of the revenue accounts into profit and loss and profit and loss into the capital account. (See p. 41.)

A trial balance can be made by using for the debit column the total of the debits for each account listed and for the credit column the total of the credits for each of these accounts. The trial balance consisting of the balances of the several accounts, as shown on p. 41, is the type most commonly used because it furnishes the data needed in the construction of the balance sheet and revenue statement.

## TRANSACTIONS FOR ILLUSTRATION NO 5

1920

- July 1 Simon Young invests \$1500 00 in a general merchandise business, and also turns over land worth \$1100 00 and buildings worth \$1200 00
- 2 Buys for cash merchandise amounting to \$800 00
- 3 Buys on time from Andrew Johnson & Co merchandise to the amount of \$500 00
- 4 Sells merchandise to Ben Rastall on time for \$500 00
- 5 Borrows \$500 00 on his note
- 6 Buys for cash merchandise amounting to \$600 00
- 8 Sells for cash merchandise to the amount of \$125 00
- 9 Sells to John Commons on time merchandise amounting to \$700 00
- 10 Sells to Ben Rastall on account merchandise amounting to \$300 00
- 11 Ben Rastall gives his note for \$300 00 in settlement of his purchase of July 10
- 12 Receives \$400 00 from John Commons on account
- 13 Purchases from Andrew Johnson & Co on account merchandise amounting to \$700 00
- 15 Receives \$300 00 for cash sales
- 16 Pays \$500 00 to Andrew Johnson & Co on account
- 17 Pays \$100 00 for rent of store
- 18 Withdraws for personal use \$150 00 cash
- 19 Sells merchandise to John Commons on time amounting to \$400 00
- 20 Pays \$250 00 for expenses of office
- 22 Buys merchandise from Andrew Johnson & Co on account to the amount of \$900 00
- 23 Sells merchandise for cash to the amount of \$500 00
- 24 Pays \$100 00 for wages and salaries
- 25 Receives note of \$300 00 from John Commons on account
- 26 Receives \$300 00 from Ben Rastall in settlement of his note

## ILLUSTRATION NO 5

## SET OF ACCOUNTS

After taking a trial balance, the revenue accounts are closed into profit and loss, which in turn is closed into capital. As these closings are usually made through journal entries, to be described in the following chapter, the closing entries in the revenue and profit and loss accounts are made in black. The same is true of the gain on merchandise entry in the merchandise account. If, however, the closing

balances were entered without being first placed in the journal, they would be written in red even in the case of the revenue and the profit and loss accounts

## CASH

1918 July	1		1500 00	1918 July	2		800 00
	5		500 00		6		600 00
	8		125 00		16		500 00
	12		400 00		17		100 00
	15		300 00		18		150 00
	23		500 00		20		250 00
	26	1125	300 00		24		100 00
			3625 00				2500 00
				26	Balance		1125 00
			3625 00				3625 00
July	27	Balance	1125 00				

## NOTES RECEIVABLE

1918 July	11		300 00	1918 July	26		300 00
	25	300 00	300 00			Balance	300 00
			600 00				600 00
July	27	Balance	300 00				

## BEN RASIAL

1918 July	4		500 00	1918 July	11		300 00
	10	500 00	300 00		26	Balance	500 00
			800 00				800 00
July	27	Balance	500 00				

JOHN COMMONS

1918				1918			
July	9		700 00	July	12		400 00
	19	400 00	400 00		25		300 00
					26	Balance	400 00
			1100 00				1100 00
July	27	Balance	400 00				

MERCHANDISE

1918				1918			
July	2		800 00	July	4		500 00
	3		500 00		8		125 00
	6		600 00		9		700 00
	13		700 00		10		300 00
	22		900 00		15		300 00
	26	Gross Profits	3500 00 650 00		19		400 00
					23	650 00	500 00
					26	Inventory	2825 00 1325 00
			4150 00				4150 00
July	27	Mdse Inv	1325 00				

NOTES PAYABLE

1918				1918			
July	25	Balance	500 00	July	5		500 00
				July	27	Balance	500 00



## ACCOUNTING PRINCIPLES

## ANDREW JOHNSON &amp; Co

1918 July	16		500 00	1918 July	3		500 00
	26	Balance	1600 00		13		700 00
					22	1600 00	900 00
			2100 00				2100 00
							2100 00
				July	27	Balance	1600 00

## RENT

1918 July	17		100 00	1918 July	26	Profit and Loss	100 00
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## MISCELLANEOUS EXPENSES

1918 July	20		250 00	1918 July	26	Profit and Loss	250 00
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## WAGES AND SALARIES

1918 July	24		100 00	1918 July	26	Profit and Loss	100 00
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## SIMON YOUNG, PERSONAL

1918 July	18		150 00	1918 July	26	Capital	150 00
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PROFIT AND LOSS

1918 July	26	Rent	100 00	1918 July	26	Gross Profit	650 00
		Expense	250 00				
		Wages & Salaries	100 00				
		Net Profits	200 00				
			<u>650 00</u>				<u>650 00</u>

SIMON YOUNG, CAPITAL

1918 July	26	Personal	150 00	1918 July	1		1500 00
	26	Balance	<u>1550 00</u>		26	<sup>1550 00</sup> Net Profits	<u>200 00</u>
			<u>1700 00</u>				<u>1700 00</u>
				July	27	Bal Capital	1550 00

SIMON YOUNG

*Trial Balance, July 26, 1920*

Cash	1125 00	
Notes Receivable	300 00	
Ben Rastall	500 00	
John Commons	400 00	
Merchandise	3500 00	
Notes Payable		500 00
Andrew Johnson & Co		1600 00
Rent	100 00	
Miscellaneous Expense	250 00	
Wages and Salaries	100 00	
Simon Young, Personal	150 00	
Simon Young, Capital		1500 00
	<u>6425 00</u>	<u>6425 00</u>

SIMON YOUNG

*Balance Sheet, July 26, 1920*

<i>Assets</i>			<i>Liabilities and Pro- prietorship</i>		
Current Assets			Current Liabilities		
Cash	\$1125	00	Notes Payable	\$500	00
Notes Rec	300	00	Andrew Johnson		
John Commons	400	00	& Co	1600	00
Ben Rastall	500	00			2100 00
Mdse Inv	1325	00	Fixed Liabilities		
		3650 00	Mtg Payable		1000 00
Fixed Assets			Proprietorship		
Buildings	1200	00	Simon Young, Cap		2750 00
Land	1000	00			2750 00
		2000 00			
		\$5850 00			\$5850 00

## PROBLEMS AND QUESTIONS

1 Check the entries in Illustration No 5 and note the account debited and the account credited for each transaction

2 On a sheet of ledger paper, open the following accounts Henry Lovell (proprietor), personal, cash, merchandise Balance the cash account, and then take a trial balance of the three accounts

June 1 Henry Lovell begins a cash grocery business, investing \$1000 00 in cash

2 He buys groceries for \$500 00 cash

3 He sells groceries for \$25 00 cash

4 His cash sales for the day amount to \$22 00

5 He returns groceries bought on June 2, receiving a refund of \$10 00 cash

6 His cash sales for two days amount to \$47 00

7 A customer returns groceries which proved unsatisfactory, and receives a refund of \$1 25 cash

8 He takes for his own use groceries amounting to \$12 50

9 Cash sales for three days amount to \$62 40

10 He buys groceries for \$250 00 cash

11 Cash sales for two days amount to \$46 25

3 What are the two fundamental assumptions of double-entry book-keeping?

4 What is the purpose of an account?

5 Give the rule for debiting and crediting asset accounts

6 Give the rule for debiting and crediting liability accounts

7 Why does the rule for debiting and crediting liability accounts serve also as the rule for debiting and crediting profit and loss and the revenue accounts?

8 In analyzing a transaction to determine what account should be debited and what amount should be credited, what questions should be asked and answered before making the entries?

9 Why is the merchandise account called a mixed account?

## CHAPTER IV

### THE JOURNAL AND LEDGER

**1. Ledgers.** — The form of accounts has already been indicated by examples in the preceding chapter. The rulings shown in these accounts are those ordinarily used in the standard ledger, each page of which has space for the following

Debit Side				Credit Side			
Date	Explanation	Folio	Amount	Date	Explanation	Folio	Amount

(See rulings for ledger accounts at the end of Chapter III.)

For accounts requiring daily or frequent balancing, a balance ledger is provided, with separate balance columns, ruled as follows

Date	Balance	Folio	Debits	Credits	Debit	Balance	Credit	Balance
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Banks and public service companies frequently use still another form of ledger, known as the Progressive or Boston Ledger, for keeping their customers' accounts. In this type, each line carries a separate account, and, through a shortening of the sheets following the one on which the names are written, ordinarily extends over several pages. The ruling of such a ledger is as follows

M o n t h				M o n t h			
Name	Balance	Debit	Credit	Balance	Debit	Credit	Balance Etc

If the balances are monthly balances, the names of the months appear above the successive Debit-Credit-Balance groups. If the balances are daily balances, the days of the week are used instead. Whether monthly or daily, however, only one column for the balances is provided.

In the case of a bank, the depositor's balance is ordinarily a credit balance. Consequently, if the account is overdrawn, the

debit balance is entered in red to distinguish it from the prevailing credit balances. In the case of a public service company, on the other hand, the customer's balance is usually a debit balance, and a credit balance, arising from an overpayment of the account, is entered in red to distinguish it from the debit balances commonly found.

The ledger itself may be either a bound book, a loose-leaf book, or a card index ledger. The loose-leaf form is very commonly employed, on account of the possibility of removing the sheets that contain inactive accounts. The card ledger is even more readily adjustable than the loose-leaf ledger. In fact, the readiness with which an account can be removed from the card ledger frequently results in the loss or misplacement of accounts.

**2. The Journal.** — The transactions recorded in the ledger are all grouped under the particular accounts to which they refer. Moreover, no explanations are placed in a ledger account, except such as may be necessary in connection with routine transactions with the individual or firm concerned. There is needed, therefore, a chronological record of all transactions, with a full explanation of each.

The old Day Book contained such a diary and explanation. In connection with it, however, a second book was necessary to indicate the accounts debited and credited for the various transactions described. Two books of original entry were thus required. Later, the functions of these two books were combined in the Journal, which was devised to contain both the diary and explanatory data and the entries showing the accounts debited and credited. This process of entering the items of a transaction in the Journal is spoken of as *journalizing*. From the Journal, the debits and credits are carried, respectively, to the debit and credit sides of the appropriate ledger accounts. This transfer is commonly called *posting*.

The rulings of the journal usually provide for the following headings.

Folio	Account	Debit	Credit
-------	---------	-------	--------

(See rulings for journal entries in Illustration No. 6 at end of this Chapter.)

Sometimes, in addition to the columns just indicated, there is a small column to the left of the debit column, to be used for the folio reference. Where such additional column is provided, the first column, instead of being used for the folio, is frequently used as a date column. In the exercise material of the text, the date is inserted on a blank line above the debit and credit entries to which it pertains.

The form of the journal entries and the method of entering the explanatory data are indicated below in Illustration No. 6, which shows the journalizing of the transactions contained in Illustration No. 5.

**3. Checking the Posting.** — At definite intervals, such as once a week or once a month, the postings from the journal to the ledger are checked, the work being done according to the following plan: (1) The diary of transactions is compared with the journal entries for each item. If the diary and the entries agree, they are both checked, to indicate that the transaction has been properly journalized. (2) The journal entries for each transaction are then compared with the corresponding ledger posting. If the entries and the postings agree, the ledger item is also checked to indicate that the journal entries have been properly posted. (3) The additions of the debits and credits of the various ledger accounts, as well as the calculations of the various balances, are then verified, and the balances entered on the trial balance sheet. (4) If the sum of the debit balances of the trial balance does not equal the sum of the credit balances, the debit entries and the credit entries are totaled on each page of the journal and carried forward to the succeeding page until the complete total of all journal debits and the complete total of all journal credits have been found. If these totals agree, the difference in the trial balance footings is clearly due to an error in the ledger postings. (5) The difference between the sum of the debit balances and the sum of the credit balances of the trial balance is then taken. If this difference is divisible by 2, the indication is that a debit has been posted as a credit, or *vice versa*. If the difference is divisible by 9, the possibility is that there has been a transposition (such as entering 36 as 63).

or a slide (such as entering \$125 00 as \$12 50) in connection with entering some particular item, the difference in such cases, owing to the nature of the decimal system, always being divisible by 9. If the sum of the debit balances differs from the sum of the credit balances by 1, or 10, or some power of 10, the likelihood is that an error has been made in addition. This is not necessarily, though very commonly, the case. Thus, these tests in connection with the difference between the total debits and the total credits of the trial balance afford an indication of the character of the error likely to be discovered in a recheck of the accounts, and frequently effect a shortening of the work.

Although a difference between the total debits and the total credits of a trial balance definitely indicates that an error in posting or journalizing has been made, an agreement between the two totals does not conclusively prove that the work has been accurately done. For instance, some item in the diary of transactions resulting in an equal debit and credit may have been omitted entirely from the journal, and consequently also from the ledger. Neither omission would prevent an equality of debit and credit balances, although the work as a whole would be incorrect. In other words, an equality of totals in the trial balance merely indicates a probability that the work has been correctly done. Only a complete recheck, such as outlined above, can be regarded as positive proof.

**4. Closing Accounts through the Journal.** — In closing the accounts which go into the balance sheet, the word *balance* is entered in red along with the amount of the balance. All accounts not closed into the balance sheet are generally closed through the journal, the closing entries in such cases being in black.

In closing through the journal, the closing entry of the account is journalized before being entered in the ledger. For example, if the debit balance of the wages account is \$500 00, the account is closed into profit and loss through the following journal entries

Profit and Loss—Wages	500 00	
Wages—Profit and Loss		500 00

These journal entries indicate that the debit balance of the account is to be carried to the debit side of the profit and loss account, and that at the same time the wages account is to be closed by the proper ledger entry. Other accounts closed into profit and loss would be similarly journalized before being finally closed.

The balance of the profit and loss account is also journalized before being closed into the capital account. For instance, if the credit balance of profit and loss is \$250.00, the proper journal entries are as follows:

Profit and Loss—Net Profits	250 00	
Capital—Net Profits		250 00

In closing accounts into profit and loss and into capital, it is customary to enter along with the debit and credit balances the names of the accounts from which they come. The necessary information is entered, therefore, in the journal, the journal entries indicating not only the accounts to which the items are to be posted, but also the accounts from which the items are transferred. As each item is posted from the journal to the ledger, there is inserted in the journal folio the page of the ledger to which the item is carried, and in the ledger folio the page of the journal from which the transfer is made.

**5. Journal Closing of the Merchandise Account.** — Since the merchandise inventory is not an item arising out of the regular transactions of a business, it is frequently entered in red to the credit of the merchandise account in connection with the calculation of the gain on merchandise. This gain is entered through the journal, the inventory being brought down as the debit balance of the merchandise account for the succeeding period. If the gain on merchandise for the period under consideration is, say, \$300.00, the amount is closed into profit and loss through the following journal entries:

Merchandise—Gross Profits	300 00	
Profit and Loss—Gross Profits		300 00



The merchandise inventory is sometimes also entered through the journal. When this is done, however, it is necessary to open a merchandise inventory account simply for the purpose of accommodating the journal entry. The loss in time does not result in any gain in clearness, and is at variance with the common practice of entering asset balances in red when asset accounts are closed. The method indicated, therefore, in the preceding paragraph will be followed in the exercise material of the text, unless the student is otherwise directed.

**6. Opening Journal Entries.** — In the illustrations thus far given, the opening journal entry has been an investment of cash, and the item has been journalized like any other cash transaction. Frequently, however, the owner invests not merely cash but also other forms of property. The form of asset contributed is immaterial so far as concerns the credit of the owner on the books of the business. For instance, instead of investing \$10,000.00 in cash, John Smith might invest in business \$5000 00 in cash, \$3000 00 in land, and \$2000 00 in buildings. The journal entries would then be

Cash	5,000 00	
Land	3,000 00	
Buildings	2,000 00	
John Smith, Capital		10,000 00
Investment of John Smith		

If against the land and buildings there should be outstanding a mortgage payable of \$2,500 00, the investment of John Smith would be the difference between the total assets and the mortgage liability. The journal entries in this case would therefore be

Cash	5,000 00	
Land	3,000 00	
Buildings	2,000 00	
Mortgage Payable		2,500 00
John Smith, Capital		7,500 00
Investment of the assets of John Smith, the outstanding mortgage being assumed by the business		

Accounting texts generally prefer the following form of entry:

Cash	5,000 00	
Land	3,000 00	
Buildings	2,000 00	
John Smith, Capital		10,000 00
Investment of the assets of John Smith		
John Smith, Capital	2 500 00	
Mortgage Payable		2,500 00
Assumption of mortgage against John Smith's assets		

The net result is the same as in the preceding form

In support of the use of the latter form, it is argued that this form of entry gives a fuller analysis of the steps taken and is more easily understood by the student or the user of the accounting record. If the student is taught, however, that an asset represents something which a business owns, and that the corresponding credit entry always represents the source of the asset received, he will more readily grasp the condensed form of entry first presented above. Experience in teaching both forms of entry has convinced the author that much time is saved and nothing is lost by the use of the shorter form.

#### ILLUSTRATION NO. 6

##### JOURNAL ENTRIES, JULY, 1918

26	Cash	1500 00	
26	Simon Young, Capital		1500 00
	Investment in general merchandise business		
27	Merchandise	800 00	
26	Cash		800 00
	Purchase of merchandise for cash		
27	Merchandise	500 00	
28	Andrew Johnson & Co		500 00
	Purchase of merchandise on time		

4			
20	Ben Rastall	500 00	
27	Merchandise		500 00
Sale of merchandise on time			
5			
26	Cash	500 00	
27	Notes Payable		500 00
Loan on note			
6			
27	Merchandise	600 00	
26	Cash		600 00
Purchase of merchandise for cash			
8			
26	Cash	125 00	
27	Merchandise		125 00
Sale of merchandise for cash			
9			
29	John Commons	700 00	
	Merchandise		00 00
Sale of merchandise on time			
10			
29	Ben Rastall	300 00	
27	Merchandise		300 00
Sale of merchandise on time			
11			
27	Notes Receivable	300 00	
29	Ben Rastall		300 00
Settlement of bill of July 10			
12			
27	Cash	400 00	
29	John Commons		400 00
Payment on account			
13			
27	Merchandise	700 00	
28	Andrew Johnson & Co		700 00
Purchase of merchandise on time			

		15		
26	Cash		300 00	
27	Merchandise			300 00
	Sales for cash			
		16		
28	Andrew Johnson & Co		500 00	
26	Cash			500 00
	Payment on account			
		17		
28	Rent		100 00	
26	Cash			100 00
	Payment of rent			
		18		
26	Simon Young, Personal		150 00	
26	Cash			150 00
	Withdrawal of cash for personal use			
		19		
29	John Commons		400 00	
27	Merchandise			400 00
	Sale of merchandise on time			
		20		
28	Expense		250 00	
26	Cash			250 00
	Payment of office expense			
27	Merchandise		0 00 00	
28	Andrew Johnson & Co			0 00 00
	Purchase of merchandise on time			
		23		
26	Cash		500 00	
27	Merchandise			500 00
	Sale of merchandise for cash			
		24		
28	Wages and Salaries		100 00	
26	Cash			100
	Payment of wages			



Instead of making a separate set of journal entries for each account closed into profit and loss, a compound entry is sometimes made to cover related items, as follows.

## CLOSING ENTRIES

Profit and Loss	450 00	
Rent		100 00
Expense		250 00
Wages and Salaries		100 00
Close of expense accounts into profit and loss		

The additional closing entries affecting the profit and loss and trading accounts would be the same as those given above in connection with the more detailed journalization of the closing

## PROBLEMS AND QUESTIONS

1 With the use of journal and ledger paper, journalize and post the following transactions. Take a trial balance of the accounts, and close the merchandise and profit and loss accounts through the journal.

The accounts to be used are Ernest Nason, Capital, Ernest Nason, Personal, Cash, Merchandise, Real Estate, Store Fixtures, Expense, Notes Receivable, Notes Payable, Discount on Purchases, and such personal accounts as may be necessary.

1918

- Jan 1 Ernest Nason invests \$4000 00 in cash and \$2200 00 in merchandise in business
- 2 Buys store building and lot for \$3400 00 cash
- 3 Buys fixtures for store for \$450 00 cash
- 4 Buys 2/10, n/30, from Leonard Nelson & Co on account merchandise to the amount of \$1000 00. Pays freight in cash, \$40 00
- 5 Sells to Oliver Goldthorpe on account merchandise amounting to \$120 00
- 6 Cash sales, \$385 00
- 7 Sells to Oliver Goldthorpe on account merchandise amounting to \$295 00, and to Lynn Knorr on account goods to the value of \$434 00
- 8 Takes Lynn Knorr's note at 30 days in payment of account
- 9 Buys from Quincy Quigley & Co on account merchandise amounting to \$894 00
- 10 Pays out \$65 00 cash for sundry expenses
- 11 Pays freight in cash \$52 00
- 12 Cash sales, \$231 00

Jan 13 Pays the account of Leonard Nelson & Co, due tomorrow, less the discount

Nelson & Co are debited for the full amount of the account, since the account is fully settled, cash is credited for the amount of cash actually remitted, and discount on purchases is credited for the amount of the discount earned

14 Sells Lynn Knorr on account goods amounting to \$276 00 •

15 Borrows from the City Bank \$1000 00, giving his note for that amount

16 Pays sundry expenses in cash \$23 00

17 Cash sales, \$314 00

18 Withdraws \$50 00 in cash for personal expenses

19 Buys merchandise on account from Leonard Nelson & Co amounting to \$725 00, 2/10, n/30

Merchandise inventory, January 20, 1918, \$3624 00

2 From the trial balance of Problem 1 make the journal entries necessary to close the revenue accounts into profit and loss and profit and loss into capital

3 Explain the ruling and use of a balance ledger and of the Boston Ledger. What are the advantages and disadvantages for a card ledger, a loose-leaf ledger, and of a bound ledger?

4 Describe the process of completely checking a set of entries

5 How is merchandise on hand at the end of a period entered? Why?

6 What is the general rule for the use of red ink in closing entries?

7 The following transactions do not constitute a connected series, but are intended to furnish drill in analysis. Make the opening entries in each case

(a) Harry Snyder begins business by investing cash, \$3000 00, merchandise, \$1500 00, store building and lot, \$3500 00, fixtures, \$700 00

(b) William Woodhead begins business with the following assets and liabilities. Cash, \$2000 00, merchandise, \$2500 00, delivery equipment, \$500 00, open account against L. W. Sales, \$600 00, notes due him, \$800 00 and note due by him to the Citizens Bank, \$750 00

(c) At the time Thomas Morrison begins business, he has the following assets and liabilities. Cash, \$4000 00, real estate, \$10,000 00, encumbered with a mortgage payable of \$4000 00, merchandise on hand, \$3500 00, accounts due from the following trade debtors — Roy Black, \$250 00, William Hopkins, \$175 00, Fred Root, \$200 00, notes receivable, \$975 00, furniture and fixtures, \$425 00, prepaid insurance, \$56 00, debts due to the following trade creditors. The National Wholesale Co., \$500 00, J. B. Wells Co., \$450 00, taxes unpaid, \$175 00

8 Journalize the following, omitting explanations, i.e., use the *skelton* method of journal entries

(a) Henry Jones buys merchandise from J. F. Newman & Co. to the amount of \$600 00, one-half cash, the balance on account

(b) Henry Jones sells merchandise to James Chochems for \$320 00, receiving \$100 00 in cash and a note at 30 days for the balance

(c) Henry Jones gives Sam Heyman & Co. his note for \$400 00 to settle his account

(d) Henry Jones sells merchandise to Fred Myers for \$308 00, receiving in payment \$100 00 cash, a note of Nathaniel Green's for \$150 00, indorsed by Myers to you, the balance being charged on account

9 A trial balance of the ledger of the insurance agency of Sidney Webb as of December 31st follows. On sheets of ledger paper open the accounts, showing their condition as of December 31st at the time of closing. Also open an account with profit and loss. Prepare the journal entries to close the revenue accounts into profit and loss. Post the entries and close the accounts. Make and post the entries to close profit and loss and personal into capital.

Cash	1,620 00	
Notes Receivable	590 00	
Accounts Receivable <sup>1</sup>	1,150 00	
Furniture and Fixtures	1,400 00	
Real Estate	5,000 00	
Accounts Payable <sup>1</sup>		525 00
Mortgage Payable		3,000 00
Sidney Webb, Personal	1,200 00	
Sidney Webb, Capital		6,000 00
Premiums Earned		3,150 00
Notary Fees Earned		420 00
Interest Earned		370 00
Salaries	900 00	
Office Expense	275 00	
Heat and Light	315 00	
Miscellaneous Expense	180 00	
Taxes and Insurance	295 00	
Interest on Mortgage	240 00	
	<u>13,465 00</u>	<u>13,465 00</u>

<sup>1</sup> These amounts are the sums of all accounts owing from debtors and owing to creditors respectively.



## CHAPTER V

### THE FORM AND USE OF COMMERCIAL PAPERS

**1. Design of Commercial Papers.** — In connection with the installation of a system of accounts for a business, it is always necessary to design the commercial papers to be used in furnishing the data required for the books of record and for the information of the parties with whom business is transacted. Before any paper of this kind is designed, however, there should be a definite plan for its use, as such a plan will determine both the character of information to be furnished and the form in which it is to be supplied. There are, of course, standard forms for such widely used papers as the check, the promissory note, and the draft. The form of other papers, such as the *purchase order*, the *invoice*, and the *credit memorandum*, varies according to the requirements of the particular business.

**2. Sales Invoice.** — When an order for goods is received by a merchant, the articles are prepared for shipment and a bill for them is sent to the purchaser. This bill is commonly known as a sales invoice, and should contain all the information needed by the bookkeeper in journalizing the transaction and by the buyer in checking the goods received with the order sent. Since the buyer may not receive the goods promptly, the invoice should show the route of shipment, if the goods are sent by freight, or the name of the express company, if they are forwarded by express. Frequently, the purchaser requests that his order number be given in the invoice, and the invoice, in consequence, should provide for such a request. The following form will meet the needs of the ordinary mercantile business:

## ILLUSTRATION NO 7

## PURCHASE AND SALES INVOICE

No _____					
<b>VALLEY FURNITURE COMPANY</b> Valley, Ill _____, 19—					
Sold to _____					
Address _____					
Shipped Via _____					
Date Shipped _____					
Buyer's Order No _____					
Classification	Article	Quantity	Rate	Charges	Credits

A classification column, such as indicated above, is needed where separate sales accounts are kept for different classes of commodities. The charges and credits columns, of course, furnish the necessary information with regard to the amounts to be charged and credited to the customer.

For over-counter sales, a record or memorandum is designed on the basis of the information necessary for the accounting records and for rendering to the purchaser the regular sales invoice. Usually, the record or memorandum is made in duplicate, one copy being given to the purchaser at the time of the sale, the other being retained by the seller as the original record of the transaction.

**3. Purchase Invoice.** — The sales invoice of the seller becomes, of course, the purchase invoice of the buyer. When it is received by the purchaser in advance of the goods, care should be taken to file it so that a delay in the arrival of the goods will not be overlooked. A tickler file, with a guide for each day of the month, is extremely useful in this connection, permitting the invoice to be filed either in the tickler under the date on which the goods should ordinarily be received, or in the invoice file under the name of the seller with a cross-reference in the tickler under the date on which inquiry regarding the shipment should be made. The precise method will depend, of course, upon the volume of purchases and the delays experienced in the arrival of goods.

The method of checking goods received varies also with the size of the business. In a small concern, the goods may be checked with the invoice itself, which is then compared with the original purchase order. In a large business, a copy of the purchase order is sent to the clerk who is to receive them. When the goods are received, they are checked with this duplicate order, which is then returned to the bookkeeper to serve as a memorandum of goods received in checking the purchase invoice. Where only part of an order is received, the receiving clerk sends to the bookkeeper a list of the items, together with the order number, retaining the duplicate order until the remainder of the shipment arrives. The department store and other concerns may pay the invoice before the goods arrive in order to take discounts, the wholesaler agreeing to make necessary adjustments if goods are not as ordered. The invoice would be entered on receipt of goods or at time of payment if this date is before receipt of goods.

After being completely verified, the invoice is entered to the credit of the seller. If the invoice has a discount date, it is filed in a tickler file under the date when payment must be made. If approved invoices are all paid at the same time each month, they should be filed together for future payment. When paid, the invoices should be filed under the name of the creditors in an appropriate place. The canceled checks sent in payment

might properly be attached to the corresponding invoices as soon as these checks are returned by the bank. In any event, a notation should be made on each invoice of the date on which it is paid.

The foregoing observations on the matter of invoice filing are not intended as definite rules, but rather as pointers on the necessity of a definite program for the handling of commercial papers which are related to accounting procedure.

**4. Promissory Note.** — A promissory note is an unconditional promise in writing by one person to another, signed by the maker, engaging to pay on demand or at a fixed or determinable future time a certain sum of money to order or to bearer. The promise is usually made to the order of the payee, who must indorse the note to render it transferable or negotiable. The general form of the instrument is shown below.

## ILLUSTRATION NO. 8

## PROMISSORY NOTE

\$500 00 \_\_\_\_\_

VALLEY, ILL., *July 1, 1918*

\_\_\_\_\_ Six months \_\_\_\_\_ after date, for value received  
 I \_\_\_\_\_ promise to pay to the order of \_\_\_\_\_ John Smith \_\_\_\_\_  
 Five Hundred and 0/100 \_\_\_\_\_ Dollars  
 at the \_\_\_\_\_ Valley National Bank, Valley, Ill \_\_\_\_\_, with  
 interest at the rate of \_\_\_\_\_ eight \_\_\_\_\_ per cent per annum from  
 \_\_\_\_\_ date \_\_\_\_\_ until paid

And, if this note is not paid in full at maturity, and it is placed in the hands of an attorney for collection, or suit is instituted to enforce collection, then I \_\_\_\_\_ agree to pay an additional sum of ten per cent of the amount of principal and interest of this note as attorney's fees, which said ten per cent shall be included in the judgment which may be rendered on this note.

Address \_\_\_\_\_

\_\_\_\_\_ Joshua Jones \_\_\_\_\_

No \_\_\_\_\_ Due \_\_\_\_\_ 7/31/18

If the foregoing note were given by Joshua Jones to John Smith in payment for merchandise, the transaction would be journalized as follows.

(a) On the books of Joshua Jones

Merchandise	500 00	
Notes Payable		500 00
Purchase of merchandise with note payable		

(b) On the books of John Smith

Notes Receivable	500 00	
Merchandise		500 00
Sale of merchandise for note receivable		

**5. Interest on Notes** — A promissory note usually bears interest, but the interest forms no part of the account either of notes payable or of notes receivable. Neither is it entered on the books until paid, is due and unpaid, or the accounts are closed and credit is taken for accrued items, in accordance with principles to be explained in a later chapter.

When the interest is paid on the foregoing note, the transaction is journalized as follows on the books of Joshua Jones

Interest Expense	20 00	
Cash		20 00
Payment on account of interest		

On the books of John Smith, to whom the interest is paid, the item is entered as follows

Cash	20 00	
Interest Income		20 00
Receipt on account of interest		

When business discounts its own notes before maturity, the bank discount, in accordance with the general practice, is treated as interest. Thus, if John Smith discounts his own 90-day note of \$500 00 at the bank at 8% his journal entries would be as follows

Cash	490 00	
Interest Expense	10 00	
Notes Payable		500 00
Discount of note at Valley National Bank, due three months from date		

**6. Discount of Note Receivable.** — In order to obtain immediate cash, a business frequently discounts its notes receivable before maturity, the proceeds usually being deposited to its credit by the bank discounting the paper. When such discounts are made, the amount of the note at maturity represents the sum upon which the discount is based. Thus, if John Smith discounts at 6% three months before it is due the \$500 00 note received from Joshua Jones, the amount to be discounted is \$520 00, and the discount amounts to \$7 80.

In discounting a note receivable, however, the business, through its endorsement of the paper, assumes a contingent liability for the payment of the obligation at maturity, for, if the maker defaults, the endorser becomes liable for both principal and interest. Instead of crediting notes receivable, therefore, an entirely new account is formed, commonly known as *Notes Receivable Discounted*. In consequence, the discount indicated in the preceding paragraph is debited and credited by John Smith as follows:

Cash	512 20	
Interest Expense	7 80	
Notes Receivable Discounted		500 00
Interest Income		20 00
Discount of note receivable at Valley National Bank		

If a note is not paid at maturity, the endorser must be notified at once, otherwise his liability ceases. If John Smith, therefore, as endorser of the note receivable discounted, receives no notice of dishonor within a few days after the maturity of the paper, the discharge of his contingent liability is indicated by the following journal entry:

Notes Receivable Discounted	500 00	
Notes Receivable		500 00
Credit to notes receivable for amount of discounted note paid by maker at maturity		

Should the note, however, be dishonored when it becomes due, Smith, as endorser, is obliged to pay it. Such payment

would result, not only in a discharge of his contingent liability but in a claim against the maker of the note for the principal and interest. To cover the payment of Jones' defaulted note, Smith therefore makes the following entries:

Notes Receivable Discounted	500 00	
Notes Receivable		500 00
Credit to notes receivable for amount of discounted note de- faulted by maker at maturity		
Joshua Jones	520 00	
Cash		520 00
Charge to Jones of principal and in- terest of his defaulted note		

If Jones has meantime become insolvent, the charge to him represents, of course, a loss or an expense.

**7. Bill of Exchange.** — A bill of exchange, or a draft, as it is more commonly called, is an unconditional order in writing by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay to a third person named therein on demand or at a fixed or determinable future time a certain sum of money to order or to bearer. The draft is usually made to order, and becomes negotiable only through endorsement. A three-party draft is shown below.

ILLUSTRATION NO. 9  
THREE-PARTY DRAFT (ACCEPTED)

*Accepted July 5, 1918*  
*William H. Jones*  
*William H. Jones*  
*William H. Jones*  
*William H. Jones*

\$ 500.00 VALLEY TILL. July 1 1918

Thirty days after date Pay to the

Order of John Smith - - - - -

Five hundred and no/100 - - - - - Dollars

For value received and charge the same to the account of

To Joshua Jones

No. 5 Green Ridge Road, Ky. *William H. Jones*

Frequently the maker and the payee or the maker and the drawee are the same party. Where this is the case, the draft is known as a two-party draft. Whether two or three party, however, the drawer usually does not make a draft without some definite understanding regarding its acceptance by the drawee.

**8. Time Draft.** — Where a draft is due on a specified date or on a certain number of days after date or presentation, it is known as a time draft, and is presented to the drawee for his acceptance. If the drawee accepts, he endorses his acceptance across the face of the instrument, converting it into a promissory note. (See Illustration No. 9.)

The accepted draft or acceptance shown in the preceding paragraph is therefore journalized as follows:

(a) On the books of William Hayes when the draft is sent:

John Smith	500 00	
Joshua Jones		500 00
Draft on Jones in favor of Smith		

(b) On the books of John Smith when the draft is accepted by Joshua Jones:

Notes Receivable	500 00	
William Hayes		500 00
Payment of Hayes' account with time draft, accepted by Joshua Jones		

(c) On the books of Joshua Jones when the draft is accepted by him:

William Hayes	500 00	
Notes Payable		500 00
Acceptance of 30-day draft drawn by Hayes, due July 31, 1918		

Frequently the drawee is a bank or other financial institution. The principle of journalizing, however, remains the same.

**9. Sight Draft.** — Where a draft is made payable at sight, it is known as a sight draft. Unless abrogated by law, three days of grace are allowed the drawee in which to pay it. Present-



ment must, therefore, first be made to fix maturity, and then for payment. In the matter of journalizing, the sight draft is treated like a check or like cash.

**10. Check.** — A check is a draft on a bank payable on demand. Like other forms of drafts, it is usually made to the order of the payee, and becomes negotiable only through endorsement. As the paid checks are returned by the bank when the depositor's account is balanced, the endorsement serves as a receipt. The ordinary form of check is shown below.

#### ILLUSTRATION NO 10 — CHECK

VALLEY, ILL., January 1 —, 1911 No 89

THE VALLEY NATIONAL BANK OF VALLEY, ILLINOIS

Pay to the order of ——— John Smith ——— \$520 00  
Five Hundred twenty and 00/100 ——— Dollars

Joshua Jones

A bank draft is simply the check of one bank on another bank, and is payable on demand. Because of the financial standing of the institution issuing it, a bank draft is generally preferred to a personal check. The form of the ordinary bank draft is given below.

#### ILLUSTRATION NO 11 — BANK DRAFT

VALLEY, ILL., January 1 —, 1911 No 3

THE VALLEY NATIONAL BANK OF VALLEY, ILLINOIS

Pay to the order of ——— John Smith ——— \$520 00  
Five hundred twenty and 00/100 ——— Dollars

STATE NATIONAL BANK  
New York City

James Brown  
Cashier

The personal check and the bank draft are both treated as cash, and journalized accordingly.

**11. Discount.** — The word *discount*, as ordinarily used, means the amount deducted by a bank from the face of a note which it buys before maturity. In accounting, this deduction is en-

tered as interest The word, however, has other business applications

Allowances are generally made by a business for the early payment of its sales invoices These allowances, known as cash discounts, though somewhat similar to interest or bank discount, are entered as discounts on sales Thus, if the Central Book Company sells to John Smith on January 1 books to the amount of \$250 00, terms 2% discount for cash in 10 days, net 30 days, and Smith pays the bill on January 5, the payment is journalized as follows

(a) On the books of the Central Book Company

Cash	245 00	
Discount on Sales	5 00	
John Smith		250 00
Receipt of payment on account		

(b) On the books of John Smith

Central Book Company	\$250 00	
Cash		\$245 00
Discount on Purchases		5 00
Payment of account		

Frequently trade allowances on the quoted price of a commodity are made by a business to its customers This allowance, known as commercial or trade discount, is usually not entered on the books of record Instead of a single discount, the allowance may consist of a series of discounts Thus, a merchant might offer to his customer a discount of 20%, 10%, and 5%, or 20, 10, and 5, on a bill of \$500 00 Such a quotation means that the actual purchase price is to be found by taking 20% from the face of the bill, 10% from the balance, and 5% from the amount then remaining The series may, of course, be converted into a single discount by the following process:

$$\$200 \times .80 \times .90 \times .95 = \$200 \times .684 = \$136.80$$

In fact, the conversion of the various percentages into one equivalent percentage is the usual form of calculation

**12. Time Calculations.** — There are various methods in vogue for the reckoning of time in interest calculations. The units of time involved are the day, the month, the quarter, the half year, and the year. In all cases involving days the day *from which* should be excluded. If a loan is made on the first day of the month and paid on the tenth day of the month and the unit of time is the day, then interest is paid for nine days. But this does not fully settle the case. The next question is as to the number of days in a year. The interest tables are generally based on a 30-day month and a 360-day year. On such a basis the interest for nine days would be  $9/30$  or  $3/10$  of the interest for one month or  $1/40$  of the interest for one year. In this case the calculation would get the same result with a month unit as the basis as it would with the year unit. In general a certain rate of interest not qualified is understood to mean a rate per year. The rate then for a half year is regarded as one half the rate for the year although technically, instead of multiplying the amount by 1.03 for a half year of interest when the rate is 6 per cent per annum, the exact method would involve the multiplication of the principal by 1.02956. The interest paid at the half-year period would itself draw interest so that the lender actually gets a rate better than 6 per cent if he gets 3 per cent of the principal twice each year. Likewise the interest for one quarter of the year is ordinarily taken as one fourth of the interest for the year.

If the interest contract makes the month the time unit, one would begin with the date of the first day of the interest period and exclude that day. Then the day in the next month having the same number as the initial day of the period will be the last day of the first month. If, however, the first day of such a period is January 31, February 28 in a common year or February 29 in a leap year will be the last day of the first month. In a common year the last day of the first month would be February 28 if the initial day were January 28, 29, 30, or 31.

**13. Treasury Method of Calculating Time.** — The interest method adopted by the United States Treasury is as follows.

Only one of the two days of the date and due date of an

obligation is taken into account in stating the time for which interest is to be calculated

A month is to be regarded as one twelfth of a year regardless of the number of days it contains. Likewise, a quarter is one fourth of a year and six months one half of a year, regardless of the number of days they contain

When an interest rate is referred to as 6 per cent or other rate, a rate per annum is understood to be implied

"In calculating interest for a fractional period, the time is the true fraction of that period. For an annual rate, the time is the exact number of days for which the interest runs, divided by the number of days in the year, 365 or 366, for a semi-annual or quarterly period, it is the number of days for which the interest runs, divided by the number of days in the particular half year or quarter year

"Unless the unit period is a month, the month does not enter into interest computations, only days and the full unit period being considered "

According to this method an interest period of a year would involve in the case of calculating interest for a part of a year the multiplication of  $1/365$  of the annual interest for a common year and  $1/366$  of the annual interest for a leap year by the number of days for the part year. The month would not be considered. It will also be noted that if the quarter is the time basis and the time in the quarter is 75 days, the interest fraction would be  $75/120$  of the interest for the quarter if the year were a common year, or  $75/121$  if the year were a leap year. In the case of the second quarter of the year the fraction would be  $75/123$  of the interest for the quarter. The half year basis would be treated in the same way as the quarter basis

If a month were taken as the basis a month would be defined as indicated in paragraph 12 above. A fraction of a month would be the number of days already elapsed divided by the number of days in the month in question

**14. The New York and Massachusetts Method.** — In the states of New York and Massachusetts a year is defined by law as consisting of 365 days.

**15. Method Recommended for Students.** — In making calculations of accruals it is recommended that the 30-day month and the 360-day year be adopted for periodic closings in which no transfer of property is involved. The net profits cannot be an exact figure since depreciation and other similar items must be an approximation. The interest tables could then be used in the periodic closings and much time saved.

When transfers of property are involved or interest payments must be made it seems preferable to adopt the method prescribed by law of the state in which the contract is made. The calculations of interest for any fraction of a year would then be made according to the method adopted by the treasury department in common year calculations. The interest due on 60 and 90 day notes at maturity would be  $60/365$  or  $90/365$  of the interest for a year if 365 days were defined as the year.

In those states where the Law Merchant is adopted and not modified by special statute, such as the state of Texas and many other states, the 30-day month and the 360-day year is adopted as the basis of the calculations. Interest calculations in Texas both for accruals and for actual interest payments should be made on the basis of the 30-day month and the 360-day year.

**16. Corrections of Table Calculations.** — If interest has been calculated on a 360-day basis a change may be made to a 365-day basis by subtracting  $1/73$  of the interest calculated on the former basis. If the interest has been calculated on a 365-day basis, it may be changed to a 360-day basis by adding  $1/72$  of the interest calculated on the former basis.

### PROBLEMS AND QUESTIONS

- 1 Why is it customary to make arrangements in advance for drawing a three-party draft?
- 2 Why do some business men very much dislike to have drafts drawn on them?
- 3 What is the most frequent use to which the two-party draft is now put?
- 4 You ship merchandise amounting to \$260.00 to Cotter & Hines, of Centerview, and draw a sight draft on them, which is attached to the bill of lading and deposited in your bank for collection. Give the entries on your books and on those of Cotter & Hines.

5 You draw on the Young Mercantile Co at sight for \$300 00 and place the draft in your bank for collection, receiving credit for that amount. The draft is not honored upon presentation. What entries on your books are then necessary?

6 You receive an invoice of \$263 00 from the Newman Cloak Co of Chicago, and at the bank pay this amount on a sight draft, to which the bill of lading is attached. Give the entries.

7 You discount at the Valley National Bank at 8% a \$600 00 note receivable payable without interest, three months from the date on which the discount is made. Journalize the transaction.

The maker of the note defaults when the note becomes due, and you are called on to pay it. Make the necessary journal entries.

You discount at the Valley National Bank at 5% three months before maturity a \$500 00 note receivable due six months after date, with interest at 6%. Journalize the transaction.

The note is paid at maturity, no notice of dishonor being received. Make the proper entry.

8 You draw at 10 days' sight on Peters & White, of Chicago, for \$500 00 in favor of the Chicago House Furnishing Co. What are the entries of each party concerned if the draft is accepted two days later, if the draft is dishonored, if the draft is paid at maturity, if because of lack of funds the draft is not paid at maturity?

9 Draw on the Immons Hardware Co at 30 days' sight for \$500 00. Give the entries of both parties if the draft is accepted, if it is paid at maturity. What would be done if the Hardware Company refuses to accept the draft?

10 On January 1, you purchase a bill of goods amounting to \$300 00, terms 2/10, n/30. On January 3 you return \$50 00 worth for credit. What amount of cash will settle the bill on January 11?

11 From what date does the discount period begin to run — the date of the invoice, the date of the shipment of the goods, or the date of the receipt of the goods?

12 Is it the practice to mail checks out on the last day of discount or to mail them in time so that they will reach their destination on the last day of discount?

13 What is the purpose of the custom of dating invoices ahead, i.e., post-dating? For example, a bill of millinery bought in July and shipped from the factory on August 1 may be accompanied by an invoice dated September 1.

14 You buy a bill of goods on July 1 amounting to \$500 00, terms 2/10, n/30. Not having the necessary cash on July 11 to pay the bill, you borrow money at 6% to take advantage of the discount. How much do you gain or lose by the transaction?

15 You purchase a bill of goods from John Smith on October 1, terms 2/10, n/30. On October 11 you are unable to pay the entire bill, but by arrangement with Smith you are to be allowed the discount on whatever portion of the bill you can meet. If you send Smith a check for \$245 00, how much credit will you receive?

16 On September 1, you purchase goods amounting to \$2,000 00, terms 2/10, n/30. You have \$2000 00 in the savings bank with which to meet the bill. This money is drawing 4%<sup>c</sup>, but must remain in the bank until October 1, or else all interest since the last interest computation day, July 1, will be forfeited. You have your choice, therefore, of the following ways of paying your bill: (a) You may let the bill run until October 1, forfeiting the discount but retaining the interest on your savings account, (b) you may withdraw your savings and pay the bill on the discount date, (c) you may borrow the money on your note for 20 days at 6%<sup>c</sup> and pay the bill on the discount date. Which plan is the best, and by what amount?

17 Why do wholesale firms use a series of discounts, such as 25%<sup>c</sup>, 20%<sup>c</sup>, and 5%<sup>c</sup>, instead of a single discount, such as 50%<sup>c</sup>?

18 Which is the better and how much— a series of 25%<sup>c</sup>, 20%<sup>c</sup>, and 10%<sup>c</sup>, or a single discount of 50%<sup>c</sup>?

19 One firm offers a piano for \$400 00, subject to discounts of 20%<sup>c</sup> and 20%<sup>c</sup>, and another offers the same make of piano with 25%<sup>c</sup> and 15%<sup>c</sup> off list. Which is the better offer, and by how much?

20 Find a single rate of discount equal to a discount series of 50%<sup>c</sup>, 25%<sup>c</sup>, 20%<sup>c</sup>, and 10%<sup>c</sup>.

21 Find the net selling price of an oak sideboard listed at \$125 00, less 25%<sup>c</sup>, 33 $\frac{1}{3}$ %<sup>c</sup>, and 10%<sup>c</sup>.

## CHAPTER VI

### THE DIVIDED JOURNAL AND THE TRADING ACCOUNT

1. **Character of Entries in a Merchandise Business.** — A review of the problems and exercises contained in the preceding chapter will show that nearly fifty per cent of the items have been posted to the cash account, the merchandise account, and the sales account. Moreover, for each transaction involving any of these accounts, there have been two postings — one to cash, merchandise, or sales, and one to the other account involved in each case. Manifestly, economy of time and effort would result if the number of postings could be reduced.

This could be accomplished to a degree by collecting the various debits and credits to these accounts and recording them as a compound entry in the general journal, thus

Cash	500 00	
Sales		200 00
John Smith		200 00
Notes Receivable		50 00
Interest Income		50 00
Merchandise	400 00	
Wages	150 00	
Office Expense	50 00	
Interest Expense	100 00	
Notes Payable	300 00	
Cash		1,000 00

The first compound journal entry above indicates how accounts having the same debit may be grouped together so that there will be only one debit posting whereas there would be four without the grouping accomplished by the compound entry. Likewise the second compound entry by grouping the accounts having a common credit account will require only one credit posting instead of five which would be required without the grouping. If a journal were selected which would contain



only cash items and all credit accounts having cash as a corresponding debit were placed on one page and all debit accounts having cash as the offsetting credit were placed on the right page, the charge and credit to cash could themselves be omitted (See Illustration No 12 below) The appearance of accounts to be credited on the debit page (left page) of such a cash journal would be a sufficient indication that cash was to be debited for the total of amounts credited to these accounts Likewise the appearance of accounts on the credit (right) page of such a journal would be a sufficient indication that cash was to be credited for an amount equal to the total of the amounts set opposite these accounts

**2. Cash Journal.** — The cash journal may consist of paper with the ordinary journal ruling, the debits being entered on the even pages (left pages) and the credits on the odd pages (right pages) For a particular period, therefore, the debit entries are on the left and the credits on the opposite page or the right. (See Illustration No 12)

As the sum of the debit entries less the sum of the credit entries is equal to the amount of cash on hand, provided the balance at the beginning is entered as the first debit, the cash journal can be used to show the cash balance at any time, and nothing is gained by retaining a cash account in the ledger The cash journal becomes, therefore, not only a book of original entry, but a ledger account as well

**3. Purchase Journal.** — It might seem logical to use a similar journal for the merchandise account, with purchases as debits on the left and sales as credits on the right, and with the merchandise inventory at the beginning as the first debit to the account The sum of the debit entries less the sum of the credit entries does not, however, give the balance of merchandise Consequently, there is no particular advantage in entering purchases and sales in the same journal On the other hand, as in a large business the recording of purchases is the work of one clerk and the recording of sales is the work of another, there is a distinct gain in having separate books of original entry for purchases and for sales

In the purchase journal are entered all purchases of merchandise as made, together with the account to be credited in each particular case. As cash purchases are entered in both the purchase journal and the cash journal, as a debit in one and a credit in the other, no record of the account to be credited in the first journal or debited in the second journal need be made. After cash purchases have been entered in each journal, however, the entries in both should be checked in the folio columns to indicate that no necessary posting has been omitted. The unchecked items in the purchase journal are then posted to the proper accounts, and a periodic closing is made, the total purchases being entered as a debit to the merchandise purchases account, which is explained in a later paragraph on the trading account.

Purchases of property other than merchandise are not entered in the purchase journal, but in the old, or, as it may now be called, the general journal. Such a differentiation is, of course, necessary. The total of purchases is used in the calculation of the gross profits arising from operation, and would fail of its purpose if purchases of items not intended for sale were included.

**4. Sales Journal.** --- The ruling of the sales journal is similar to that of the cash and purchase journals. In the sales journal are entered all sales of merchandise as made, together with the account to be debited in each transaction. This debit account is, however, unnecessary in cash sales, which, like cash purchases, are entered in both the sales journal and the cash journal, the debit entries of the latter constituting the credit entries of the former. After checking the corresponding items in the two journals to indicate that the proper cross-entries in the cash journal and the sales journal have been made, the unchecked entries in the sales journal are posted to the proper accounts. As in the case of the purchase journal, a closing is periodically made, the total of the sales being carried to the credit of the merchandise sales account in the ledger.

**5. General Ledger.** — Although relieved of more than seventy-five per cent of the original entries by means of the special journals indicated, the general journal still serves a useful pur-

pose In it are recorded the opening entries of a business for assets and liabilities contributed to it or taken over by it, these assets and liabilities being listed as the debits and credits of a compound journal entry Where cash forms all of the assets, the opening entry is made simply in the cash journal, but, where cash is only one of a number of assets, the cash item is entered in both the cash journal and the general journal, the two entries being checked to indicate that the proper cross-entry has been made

In the general journal, also, are recorded the closing entries of the revenue accounts in connection with the formation of the profit and loss account, and the closing entry of the latter in connection with the transfer of its balance to the capital account, as well as adjustment entries, credit purchases of expense items, credit purchases of property items, and all other entries not belonging to any of the special journals already described

**6. Trading Account.** — The trading account is practically a reconstruction of the old merchandise account, which was destroyed, of course, through the formation of the merchandise purchases and the merchandise sales accounts Unlike the old merchandise account, however, the trading account consists of totals rather than of individual items To the trading account are debited the merchandise inventory at the beginning of the period and the balance of the merchandise purchases account for the period under consideration, while to it are credited the balance of the merchandise sales account for the interval and the merchandise inventory at the close of the period The balance of the account, as in the old merchandise account, represents the gross profits, which are closed into profit and loss. The trading account, therefore, may be said to bear the same relation to the merchandise purchases and merchandise sales accounts that profit and loss bears to the revenue accounts

**7. Return Purchases and Allowances.** — Where merchandise is returned by a business on account, or allowances are made on merchandise purchases, entries are made in the general journal to the debit of the seller and to the credit of the merchandise purchases account Consequently, the balance of the mer-

merchandise purchases account represents the net purchases, and is the amount to be debited to the trading account.

If the number of items of return purchases and allowances is large a separate account may be set up and closed into merchandise purchases or trading when the books are closed

**8 Return Sales and Allowances.** — The return of goods to a business, or allowances made by it on merchandise sales, are also entered in the general journal the transactions being debited to the merchandise sales account and credited to the customers involved. The balance of the merchandise sales account, therefore, represents the net sales, and is entered as a credit to the trading account

If the number of items of return sales and allowances is large, a separate account may be carried and closed into merchandise sales or trading at the time of closing the books

**9 Invoices as Original Entries.** — Purchase invoices are frequently bound, or pasted in a bound book, and used as a purchase journal. The sellers are then credited by postings direct to the ledger, the total of the invoices for a given period constituting the debit to the merchandise purchases account

Sales invoices are also frequently used as a sales journal. Where this is the case, the invoices are printed, bound, and numbered in duplicate, the originals being sent to the buyers and the duplicates constituting a bound book of original entry, from which the individual debits are posted and the total credit to merchandise sales is taken

**10. Treatment of Discount in Special Journals.** — When an invoice is sent or received, the gross amount of the invoice is entered in the sales journal or in the purchase journal, as the case may be, the amount being later debited or credited to the proper account. When paid, the gross amount of the invoice is entered on the proper side of the cash journal, together with the name of the customer from whom payment is received or the name of the creditor to whom remittance is made. The discount is entered on the opposite side of the ledger, becoming a discount on sales in the case of a sales invoice and a discount on purchases in the case of a purchase invoice. Thus, the full

amount of a sales invoice is entered as a debit to cash, the discount becoming a credit to cash under the designation of discounts on sales. Conversely, the gross amount of a purchase invoice is entered on the credit side of the cash journal, the discount in this case becoming a debit to cash under the heading of discounts on purchases. The result is a correct cash balance and a correct debit or credit of the full amount of the invoice to the proper personal account. This style of entering discounts is not used in the columnar journals to be treated in a succeeding chapter.

**11. Illustration.** — The illustration below will show in detail the method of recording merchandise transactions by means of the divided journals described above. The transactions involved precede the illustrated account entries.

- TRANSACTIONS FOR ILLUSTRATION NO. 12
- 1918  
Mar
- 1 Russell Scott opens business with the following assets: cash, \$1600 00, merchandise, \$2000 00, store fixtures, \$500 00
  - 2 Buys merchandise to the amount of \$600 00 from the Emporium on account, terms 2/10, n/30
  - 3 Pays freight charges in cash amounting to \$14 00. Sells merchandise to Henry Waddell on account to the amount of \$240 00
  - 4 Buys two horses and a wagon from the City Sales Co. for \$300 00, giving a 60-day note in payment
  - 5 Cash sales, \$150 00. Sells Edward Lange on account merchandise to the amount of \$250 00
  - 6 Buys a lot and small store building from the Reuter Realty Co. for \$2000 00, paying \$800 00 cash and giving a one-year note for the balance
  - 8 Cash sales, \$120 00. Buys on account from the Emporium merchandise amounting to \$750 00, terms 2/10, n/30
  - 9 Sells Henry Waddell on account merchandise to the amount of \$325 00. Pays insurance on store building, fixtures, and stock, amounting to \$26 00
  - 10 Cash sales, \$135 00. Pays the Emporium bill of March 2 in full by remitting \$588 00 in cash
  - 11 Buys a cash register from the National Cash Register Co. for \$200 00, giving a 15-day note, bearing 6% interest in payment. Sells Edward Lange on account merchandise to the amount of \$150 00

- Mar 12 Buys hay and other stable supplies for \$75 00 cash
- 13 Pays for postage, stationery, and other store expenses \$32 00 in cash Pays store salaries for two weeks, amounting to \$50 00
- 15 Cash sales, \$126 00
- 16 Henry Waddell pays \$200 00 cash on account and gives a 60-day note for \$300 00 Credit of \$10 00 allowed Waddell on account for merchandise returned
- 17 Pays the Emporium bill of March 8, taking the discount
- 18 Sells Henry Waddell on account merchandise amounting to \$225 00
- 19 Buys from the Emporium, 2/15, n/30, merchandise to the amount of \$950 00
- 20 Sells Edward Lange on account merchandise amounting to \$175 00 Returns \$18 00 worth of damaged goods to the Emporium for credit
- 22 Pays cash for sundry store expenses amounting to \$15 00
- 23 Cash sales, \$260 00
- 24 Edward Lange pays \$200 00 on account, and is allowed \$50 00 additional credit in exchange for harness for delivery team
- 25 The Emporium allows credit of \$25 00 for damage to merchandise bought on March 19
- 26 Pays note to National Cash Register Co, due today, with \$50 interest
- 27 Pays store salaries for two weeks, \$50 00 and sundry store expenses amounting to \$32 00
- 28 Sells Henry Waddell on account merchandise amounting to \$185 00
- 30 Pays the wages of the driver of the delivery truck amounting to \$37 50 Returns \$25 00 worth of merchandise to the Emporium for credit Allows credit of \$15 00 to Henry Waddell for goods returned
- 30 Merchandise inventory, \$2,785 00

Accounts to be kept Russell Scott, capital Russell Scott, personal, merchandise purchases, merchandise sales, merchandise inventory, store fixtures, delivery equipment, freight in; notes receivable, notes payable, real estate, insurance, discount on sales, discount on purchases, delivery expense, store expense, interest, personal accounts as needed

Make the original entries, post, and take a trial balance.

Close the revenue accounts into profit and loss, and profit and loss and Russell Scott, personal, into capital

Close the books, and take another trial balance after closing

## ILLUSTRATION NO 12

## THE DIVIDED JOURNAL

Dr.

CASH

1918					
Mar	1	Original Investment	✓	1600	00
	5	Cash Sales	✓	150	00
	8	Cash Sales	✓	120	00
	10	Cash Sales	✓	135	00
		Discount on Purchases	88		00
	15	Cash Sales	✓	120	00
	16	Henry Waddell Paid on account	84	200	00
	17	Discount on Purchases	88	15	00
	23	Cash Sales	✓	260	00
	24	Edward Lange Paid on account	84	200	00

2818 00

Mar | 31 Balance

136 00

CASH

Cr

1918					
Mar	3	Freight In	88	14	00
	6	Real Estate Part Pay Lot and Bldg	85	800	00
	9	Insurance Bldg, Fix and Stock	87	26	00
	10	Emporium Invoice Mar 2	86	600	00
	12	Delivery Expense Hay and Other Stable Sups	88	75	00
	13	Store Expense Postage, Stationery, etc	87	32	00
		Store Expense Store Salaries	87	50	00
	17	Emporium Invoice Mar 8	86	750	00
	22	Store Expense Sundries	87	15	00
	26	Notes Payable Nat'l Cash Reg Note	86	200	00
		Interest Nat'l Cash Reg Note	86		50
	27	Store Expense Store Salaries	87	50	00
		Store Expense Sundries	87	32	00
	30	Delivery Expense Wages Truck Driver	88	37	50
		<b>Balance</b>		<b>136</b>	<b>00</b>
				<b>2818</b>	<b>00</b>

# DIVIDED JOURNAL AND TRADING ACCOUNT

79

## PURCHASES

F

1918					
Mar	2	Emporium	Inv 540,2/10,n/30	86	600 00
	8	Emporium	Inv 600,2/10,n/30	86	750 00
	10	Emporium	Inv 972,2/15,n/60	86	950 00
	30	Merchandise Purchases	Total Purchases	87	2300 00

## SALES

F

1918					
Mar	1	Henry Waddell	Inv 10	84	240 00
	5		Cash Sales	✓	150 00
		Edward Lange	Inv 114	84	250 00
	8		Cash Sales	✓	120 00
	9	Henry Waddell	Inv 260	84	325 00
			Cash Sales	✓	135 00
	11	Edward Lange	Inv 319	84	150 00
	15		Cash Sales	✓	126 00
	18	Henry Waddell	Inv 629	84	225 00
	20	Edward Lange	Inv 635	84	175 00
	23		Cash Sales	✓	260 00
	28	Henry Waddell	Inv 1059	84	185 00
	30	Merchandise Sales	Total Sales	87	2341 00



## GENERAL JOURNAL

MARCH, 1918

		1			
✓	Cash		1600 00		
85	Merchandise Inventory		2000 00		
85	Store Fixtures		500 00		
85	Russell Scott, Capital			4100 00	
	Original investment				
		4			
85	Delivery Equipment		300 00		
86	Notes Payable			300 00	
	Sixty-day note for horse and wagon				
		6			
85	Real Estate		1200 00		
86	Notes Payable			1200 00	
	One-year note for balance lot and bldg				
		11			
85	Store Fixtures		200 00		
86	Notes Payable			200 00	
	Fifteen-day note to Nat'l Cash Register Co for cash register				
		16			
84	Notes Receivable		300 00		
84	Henry Waddell			300 00	
	Sixty-day note on account				
		17			
87	Merchandise Sales		10 00		
84	Henry Waddell			10 00	
	Credit for merchandise returned				
		20			
86	Emporium		18 00		
87	Merchandise Purchases			18 00	
	Allowance for damaged goods returned				
Carried Forward			6128 00	6128 00	

# DIVIDED JOURNAL AND TRADING ACCOUNT

81

	Brought Forward	6128 00	6128 00
	24		
85	Delivery Equipment	50 00	
84	Edward Lange		50 00
	Allowance on account for harness		
	25		
86	Emporium	25 00	
87	Merchandise Purchases		25 00
	Allowance for damaged goods returned		
	30		
86	Emporium	25 00	
87	Merchandise Purchases		25 00
	Merchandise returned		
87	Merchandise Sales	15 00	
84	Henry Waddell		15 00
	Credit for merchandise returned		
		6243 00	6243 00
	CLOSING ENTRIES		
	March 30		
88	Trading—Mdse Inv Beginning of period	2000 00	
85	Mdse Inv —Trading		2000 00
	Closing of Mdse Inv beginning of period into trading		
88	Trading—Net Purchases	2232 00	
88	Merchandise Purchases — Net Pur		2232 00
	Closing of merchandise purchases into trading		
88	Trading — Freight In	14 00	
88	Freight In—Trading		14 00
	Closing of freight in into trading		

87	Merchandise Sales—Net Sales	2316 00	
88	Trading—Net Sales		2316 00
	Closing of merchandise sales into trading		
85	Mdse Inv End of Period—Trading	2785 00	
88	Trading—Mdse Inv End of Period		2785 00
	Entry of merchandise inventory end of the period		
88	Trading — Gross Profits	855 00	
89	Profit and Loss — Gross Profits		855 00
	Closing of trading into profit and loss		
89	Profit and Loss—Store Expense	179 00	
87	Store Expense—Profit and Loss		179 00
	Closing of store expense into profit and loss		
89	Profit and Loss —Delivery Expense	112 50	
88	Delivery Expense—Profit and Loss		112 50
	Closing of delivery expense into profit and loss		
89	Profit and Loss—Interest	50	
88	Interest—Profit and Loss		50
	Closing of interest into profit and loss		
89	Profit and Loss — Insurance	260 00	
87	Insurance — Profit and Loss		260 00
	Closing of insurance into profit and loss		
88	Discount on Purchases — Profit and Loss	27 00	
89	Profit and Loss — Disc on Pur		27 00
	Closing of discount on purchases into profit and loss		
89	Profit and Loss — Net Profits	564 00	
86	Russell Scott, Capital — Net Profits		564 00
	Closing of profit and loss into capital		

The closing entries are made in detail above. The related entries may be combined into compound journal entries, and the closing entries abbreviated as follows

# GENERAL JOURNAL

MARCH, 1918

CLOSING ENTRIES		
March 30		
Trading	1245 00	
Mdsc Inv Beginning of Period		2000 00
Merchandise Purchases		2232 00
Freight In		14 00
Closing of the merchandise accounts into trading		
Sales	2316 00	
Mdsc Inv End of Period	2785 00	
Trading		5101 00
Trading — Gross Profits	855 00	
Profit and Loss — Gross Profits		855 00
Closing of trading into profit and loss		
Profit and Loss	318 00	
Store Expense		170 00
Delivery Expense		112 50
Interest Paid		50
Insurance		26 00
Closing the expense accounts into profit and loss		
Discount on Purchases — Profit and Loss	27 00	
Profit and Loss — Discount on Pur		27 00
Closing of discount on purchases into profit and loss		
Profit and Loss — Net Profits	564 00	
Russell Scott, Capital — Net Profits		564 00
Closing of profit and loss into capital		

## LEDGER OF RUSSELL SCOTT

NOTES RECEIVABLE											
F						F					
1918						1918					
Mar	16		J80	300	00	Mar	30	Balance		300	00
Mar.	31	Balance		300	00						

## HENRY WADDELL

1918						1918					
Mar	1		S79	240	00	Mar	16		J80	300	00
	9		S79	325	00				78	200	00
	18		S79	225	00		17		J80	10	00
	28		S79	185	00		30		J81	15	00
								Balance		450	00
										975	00
Mar	31	Balance		450	00						

## EDWARD LANGE

1918						1918					
Mar	5		S79	250	00	Mar	24		C78	200	00
	11		S79	150	00				J81	50	00
	20		S79	175	00		30	Balance		325	00
										575	00
Mar.	31	Balance		325	00						

# DIVIDED JOURNAL AND TRADING ACCOUNT

85

## MERCHANDISE INVENTORY

F				F			
1918 Mar	1	Inventory	J80 2000 00	1918 Mar	30	Trading	J82 2000 00
	31	Inventory	J82 2785 00				

## DELIVERY EQUIPMENT

1918 Mar	4		J80 300 00	1918 Mar	30	Balance	350 00
	24		J81 50 00				
			350 00				350 00
Mar	31	Balance	350 00				

## STORE FIXTURES

1918 Mar	1		J80 500 00	1918 Mar	30	Balance	700 00
	11		J80 200 00				
			700 00				700 00
Mar	31	Balance	700 00				

## REAL ESTATE

1918 Mar	6		J80 1200 00	1918 Mar.	30	Balance	2000 00
			C78 800 00				
			2000 00				2000 00
Mar	31	Balance	2000 00				

## ACCOUNTING PRINCIPLES

## NOTES PAYABLE

F				F			
1918 Mar	26		C78 200 00	1918 Mar	4		J80 300 00
	30	Balance	1500 00		6		J80 1200 00
					11		J80 200 00
			1700 00				1700 00
				Mar	31	Balance	1500 00

## EMPORIUM

1918 Mar	10		C78 600 00	1918 Mar	2		P79 600 00
	17		C78 750 00		8		P79 750 00
	20		J80 18 00		19		P79 950 00
	25		J81 25 00				
	30		J81 25 00				
		Balance	882 00				
			2300 00				2300 00
				Mar	31	Balance	882 00

## RUSSELL SCOTT, CAPITAL

1918 Mar	30	Balance	4664 00	1918 Mar	1		J80 4100 00
					30	Net Profits	J82 564 00
			4664 00				4664 00
				Mar	31	Balance	4664 00

F				INSURANCE				F			
1918								1918			
Mar	9			C78	26	00		Mar	30	Profit & Loss	J82 26 00

## MERCHANDISE SALES

1918						1918					
Mar	17			J80	10	00		Mar	30		J79 2341 00
	30			J81	15	00					
		Net Sales		J82	2316	00					
					2341	00					2341 00

## MERCHANDISE PURCHASES

1918						1918					
Mar	30			P70	2300	00		Mar	20	J81	18 00
									25	J81	25 00
									30	J81	25 00
										Net Purchases	J81 2232 00
					3000	00					2300 00

## STORE EXPENSE

1918						1918					
Mar	13			C78	32	00		Mar	30	Profit & Loss	J82 179 00
				C78	50	00					
	22			C78	15	00					
	27			C78	50	00					
				C78	32	00					
					179	00					179 00



## ACCOUNTING PRINCIPLES

## DELIVERY EXPENSE

F				F			
1918 Mar	12		C78 75 00	1918 Mar	30	Profit & Loss	J82 112 50
	30		C78 37 50				
			112 50				112 50

## DISCOUNT ON PURCHASES

1918 Mar	30	Profit & Loss		27 00	1918 Mar	10	C78 12 00
						17	C78 15 00
				27 00			27 00

## FREIGHT IN

1918 Mar	3		C14 14 00	1918 Mar	30	Trading	J81 14 00
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## INTEREST EXPENSE

1918 Mar	20		C78 50	1918 Mar	30	Profit & Loss	J82 50
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## TRADING

1918 Mar	1	Mdse Inv	J81 2000 00	1918 Mar	30	Net Sales	J82 2316 00
	30	Net Purchases	J81 2232 00			Mdse Inv	J82 2785 00
		Freight In	J81 14 00				
		Gross Profits	J82 855 00				
			5101 00				5101 00

F PROFIT AND LOSS						F					
1918						1918					
Mar	30	Store Exp	J82	179	00	Mar	30	Gross Profits	J82	855	00
		Deliv Exp	J82	112	50			Disc on Pur	J82	27	00
		Interest Exp			50						
		Insurance	J82	26	00						
		Net Profits	J82	564	00						
				882	00					882	00

### PROBLEMS AND QUESTIONS

1 Make a cash journal, general journal, purchase journal, and sales journal from ordinary journal paper Enter the transactions listed below, post them to the ledger, take a trial balance, and close the accounts

1918

- Mar 1 John Smith begins a coal business by turning over the following Building, \$1500 00, land, \$1200 00, cash, \$250 00, furniture and fixtures, \$300 00 The land and building have a mortgage payable outstanding against them to the amount of \$750 00
- 2 Buys from the Central Coal Co , 7 tons of nut coal at \$8 00 a ton and 10 tons of lump coal at \$7 00 a ton, 2/10, n/30
- 3 Sells to J F Sanders on account 3 tons of nut coal at \$11 00 a ton, to M H Borders on account 5 tons of lump coal at \$10 00 a ton, and to Walter Love for cash 2 tons of nut coal at \$10 50 a ton
- 4 Receives invoice from the Valley Coal Co for the following items
- |   |          |
|---|----------|
| 5 Tons Mine Run Coal, at \$6 00 a ton (2000 lbs ) | \$30 00  |
| 6 Tons Lump Coal, at \$7 00 a ton                 | 42 00    |
| 4 Tons Nut Coal, at \$8 00 a ton                  | 32 00    |
|   | \$104 00 |

Upon weighing, there are found the following shortages  
200 lbs Mine Run Coal, 100 lbs Lump Coal, and  
200 lbs Nut Coal

- 5 Sales as follows  
M H Borders, 4 tons Nut, at \$11 00 a ton, 2/10, n/30  
R N Johnson, 3 tons Lump, at \$10 00 a ton, cash  
Valley Hotel, 3 tons Mine Run, at \$8 00 a ton, 2/10, n/30

## Purchases as follows

Valley Coal Co , 2/10, n/30

10 Tons Nut, at \$9 00

4 Tons Lump, at \$7 00

6 Tons Mine Run, at \$7 00

On receipt of the coal, it is discovered from samples to be of inferior quality, and an allowance of \$7 75 is made by the Valley Coal Co

- Mar 6 John Smith decides to invest \$1000 00 additional in the business, and spends \$900 00 of this for the construction of coal bins and loading facilities. He then hires day laborers to shovel coal into the bins, paying them \$25 00 for their services. He spends \$10 00 additional in repairs to the building.

The following amounts are paid on account

Invoice of March 2 of Central Coal Co , less discount

Invoice of March 5 of Valley Coal Co , less discount

## 7 Collections as follows

J. T. Sanders, \$33 00

M. H. Borders, \$50 00

Valley Hotel, \$23 52, amount of bill of March, less the discount

## 8 Sales as follows

Valley Hotel, 6 tons Mine Run, at \$8 00 a ton on account

Central Hotel, 5 tons Nut, at \$10 50, cash

Capital Boarding Club, 4 tons Lump, at \$10 00 on account

## 9 Purchases as follows

Central Coal Co on account

20 Tons Nut, at \$7 75

30 Tons Lump, at \$7 00

25 Tons Mine Run, at \$7 00

## 10 Sales as follows

Central Manufacturing Co , 10 tons Mine Run, at \$8 00 on account

Central Hotel, 5 tons Nut, at \$10 50, cash

Valley Lumber Mills, 8 tons Lump, at \$10 00, on account

- 11 The Valley Lumber Mills reject one ton of coal on account of inferior quality, and return it for credit

- 12 The Central Manufacturing Co makes a note for \$80 00 for 3 months at 8% in settlement of its account

- 13 John Smith discounts the note at 7% at the Valley National Bank

- 14 Pays the Valley Coal Co in full for purchases of March 4

Receives payments as follows on account

Valley Hotel, \$48 00

Capital Boarding Club, \$40 00

Makes the following payments

Office Salaries, \$175 00

Stationery and other office expenses, \$25 00

- 15 Calculate the balances of the accounts and check the entries, then take a trial balance. The business has \$400 00 worth of coal on hand. Close the accounts through the journal

2 What per cent of the postings required by the regular journal is saved for items entered in (a) the cash journal, (b) the purchase journal, (c) the sales journal? About what per cent of the total transactions are entered in these special journals?

3 What economy other than that in posting results from the use of the special journals?

4 Compare the trading account with the merchandise account

5 Make a trading account from the following items

Merchandise at the beginning of the Period	\$1,500 00
Merchandise Purchases	10,500 00
Merchandise Sales	15,000 00
Return Purchases	250 00
Return Sales	150 00
Freight In	35 00
Office Expense	50 00
Merchandise on Hand at Close of Period	1,400 00

6 The balance of each account on the books of Samuel J. Smith, hardware merchant, on September 30 follows

(a) Construct the trial balance

(b) The merchandise inventory on September 30th was \$8700 00  
Construct a statement of Losses and Gains and a Financial Statement

(c) Give the journal entries to close the books

<sup>1</sup> Accounts Payable	\$2,500 00
<sup>1</sup> Accounts Receivable	5,200 00
Cash	5,075 00
Commission Earned	500 00
Delivery Equipment	2,000 00
Delivery Expense	375 00
Expense	700 00
Heat and Light	500 00
Interest Earned	250 00
Merchandise Purchases	30,800 00
Merchandise Sales	20,700 00
Mortgage Payable	4,000 00
Notes Payable	3,000 00
Notes Receivable	2,000 00
Real Estate	8,000 00
Salaries	2,800 00
Samuel Smith, Capital	18,000 00
Samuel Smith, Personal	300 00
Taxes	200 00

<sup>1</sup> These items are the sums of amounts owing by debtors and owing to creditors

# CHAPTER VII

## JANUARY TRANSACTIONS OF THE VALLEY FURNITURE STORE

### ILLUSTRATING THE USE OF SPECIAL JOURNALS

1. **Taking Over the Urban Furniture Co.** — On January 1, 1914, Frank Williams starts into the furniture business under the firm name of Valley Furniture Store. He takes over the assets and assumes the liabilities of the Urban Furniture Co on the basis of the following statement, prepared by Erwin Beckman & Co, Certified Public Accountants, paying out of his own personal assets \$23,275 00 to John Smith, the owner of the Urban Furniture Co

#### BALANCE SHEET OF URBAN FURNITURE CO, DECEMBER 31, 1913

<i>Assets</i>			
Cash		\$500 00	
Accounts Receivable		5,000 00	
St Luke's Hospital	\$1,000 00		
Bagdad University	2,000 00		
Rice Mfg Co	500 00		
Smith Institute	600 00		
J H Brigham	400 00		
K C Riley	500 00		
Merchandise Inventory		22,275 00	
Fixtures		1,000 00	
Delivery Equipment		3,000 00	\$31,775 00

#### *Liabilities and Proprietorship*

Notes Payable		\$1,000 00	
(Note in favor of the Grand Rapids Furn Co, dated Jan 9, 1913, for 1 yr)			
Accounts Payable		7,500 00	
Sheboygan Chair Co	\$2,400 00		
Michigan Bed Co	1,000 00		
Wilson Carpet Works	2,100 00		
Haywood Furn Co	2,000 00		
John Smith, Capital		23,275 00	\$31,775 00

It was also provided that the building of the Urban Furniture Co. should be leased from Chester Allen, the owner, for the year at \$100 00 per month (No entry is made in the journal in regard to this lease )

2. **Order of Accounts in the Ledger.** — After the opening entries are made in the general journal, these opening entries are posted to the ledger Before this posting is made, however, it is necessary to determine the accounts which are to be kept in the operation of the books of the Valley Furniture Store

The accounts to be kept are classified below, mainly with reference to the order which they are to take in the ledger The ledger order is dictated mainly by the order in which the several accounts appear in the balance sheet and revenue statement which are to be made at the end of the month of January If the accounts in the trial balance have the same order as that given the accounts in the ledger, the trial balance can show the accounts in the same order as they are shown in the ledger and they can be taken off in regular order in connection with the preparation of the balance sheet and the revenue statement The classification, however, is not the order in which the accounts would appear in a ledger index which shows the accounts listed alphabetically There should appear as the first page of every ledger, an index to the ledger accounts The following classification of accounts will be used for the Valley Furniture Store during the month of January

A    *Assets*

1	Cash (as per Cash Book)	
2	Accounts Receivable	<i>Page</i>
	(a) Bagdad University . . . . .	1
	(b) J H Brigham . . . . .	1
	(c) H R Caldwell . . . . .	1
	(d) J Collins . . . . .	2
	(e) Foster Hall . . . . .	2
	(f) Rice Mfg Co . . . . .	2
	(g) K C Riley . . . . .	3
	(h) St Luke's Hospital . . . . .	3
	(i) Smith Institute . . . . .	3
	(j) Square's (H P ) Business College . . . . .	4

	<i>Page</i>
(k) H P Henderson . . . . .	4
(l) H R Scott . . . . .	4
(m) R H Thompson . . . . .	5
(n) Wm Ward . . . . .	5
(o) Wm Day . . . . .	5
(p) Hotel Bismarck . . . . .	6
3 Merchandise Inventory . . . . .	6
4 Scrap . . . . .	6
5 Supply Invs . . . . .	7
6 Deferred Exp . . . . .	7
7 Store and Office Fixts . . . . .	7
8 Deprec Res for Fixts . . . . .	8
9 Delivery Equipment . . . . .	8
10 Depreciation Reserve for Equipment . . . . .	8
11 Land . . . . .	9
12 Buildings . . . . .	9
13 Depreciation Reserve for Buildings . . . . .	9

### *B Liabilities and Proprietorship*

1 Notes Payable . . . . .	10
2 Accounts Payable . . . . .	
(a) Cross Farming Co . . . . .	10
(b) Haywood Furniture Co . . . . .	10
(c) Michigan Bed Co . . . . .	11
(d) Wilson Carpet Co . . . . .	11
(e) Sheboygan Chair Co . . . . .	11
(f) Loey Lock and Safe Co . . . . .	12
(g) Sample Fur Co . . . . .	12
(h) Underwood Typewriter . . . . .	12
3 Proprietorship . . . . .	
(a) Frank Williams, Capital . . . . .	13

### *C Revenue Accounts*

#### Income Accounts (not a Ledger Account)

(a) Merchandise Sales . . . . .	13
(b) Sales Returns and Allowances . . . . .	13
(c) Financial (not a Ledger Account)	
(1) Discount on Purchases . . . . .	13
(2) Interest Income . . . . .	14

#### Expense

(a) Merchandise Purchases . . . . .	14
(b) Purchase Rets and Allow . . . . .	14

(c) Administrative (not a Ledger Account)	Page
(1) Salaries	15
(2) Miscellaneous Admin	15
(d) Selling Expense (not a Ledger Account)	
(1) Advertising	16
(2) Salaries	16
(3) Miscellaneous Selling Expense	16
(e) Delivery Expense	17
(f) Financial (not a Ledger Account)	
(1) Interest Expense	17
(2) Discount on Sales	17
(g) General Expense (not a Ledger Account)	
(1) Depreciation	18
(2) Miscellaneous	18
(3) Over and Short	18

#### *D Closing Accounts*

1 Trading	19
2 Profit and Loss	19

**3. Groups of Accounts.** — It will be noticed in the classification given above, that a certain number of captions represent the title of accounting groups, instead of ledger accounts. Considering the use made of the balance sheet, it is advantageous to have all the customer accounts in one total under the caption of accounts receivable, as well as to have a list of the detail customer accounts. There is, therefore, found a group caption to the customer accounts when they appear in a balance sheet. The same explanation can be made with the caption for the group of accounts payable. The heading of proprietorship, under which is listed the account of Frank Williams, marks this account off from the group of definite liabilities, so that it will be understood to be a type of obligation of the business, different from that which is represented by promises to pay definite sums of money at specific times, or obligations to pay certain accounts at stated times. The proprietorship claim against the assets of a business is a claim in perpetuity and is never paid in full unless the business itself is liquidated.

It will also be noted that certain groups of accounts appear



under the heading of revenue accounts. The financial group of income accounts represents earnings due to efficient financial services, and from investments incidental to the main business. The expense accounts are grouped according to the services rendered and follow in general the lines of division of labor in the business itself. There will ordinarily be one or more employees whose attention is devoted to administration, some employees whose attention is given to selling, others who are charged with the delivery service. Then, there will be the general financial expenses such as interest and discount on sales. The general expense account is meant to contain all those items not otherwise classified. If at any time the amount of a sundry item not otherwise classified, becomes large, the general expense account would become the name of a group of accounts and would be split up into the cost of services rendered, under the caption of general expense. For example, rent, janitor services, cost of heat and light, might become the names of separate accounts instead of being charged to general expense, if the total expenditure under these captions were large in amount.

The reason for the grouping of expense accounts is found in the explanation of why the accounts should be set up in the first place. There will, in general, be a standard expense under the caption of the cost of the several services which are recognized as distinct. This standard expense may grow out of the experience of the manager of the business, or it may grow out of the experience of others who have been engaged in the same business. It will in general be recognized that administrative expense should not be more than a certain per cent of total sales, that selling expense should not be more than a certain per cent of gross sales, and likewise for other expenses. It will, likewise, be recognized that there should be some proportion between advertising and the total of selling expense. After all, then, the record of costs is to be used by the manager in checking up to discover the points at which his business may be inefficient, and the points at which it is regarded as particularly efficient. Moreover, since the groups of expenses follow along

the lines of division of labor, they serve to enable the manager to hold certain individuals responsible for efficient service and also place him in position to reward them for efficient service

**4. Closing Accounts.** — The closing accounts serve the purpose of collecting the incomes and expenses with a view to calculating the net increase in proprietorship, which is carried to the credit of the capital account of the owner

**5. Payroll.** — The weekly payroll of the Valley Furniture Store from January 1, was as follows:

Frank Williams, Manager	\$100 00
H P McCulloch, Salesman	25 00
J R James, Bookkeeper	30 00
R P Ranger, Driver	10 00
John Moulton, Office Boy	7 00
Total	<u>\$172 00</u>

All of the employes are directly responsible to the manager, who can employ or dismiss the working force at his discretion

**6. Erasures.** — There are to be no erasures in this set of books. If an error has been made in journalizing, it can be corrected by a journal entry. For example, suppose that by mistake, a sale of \$5 00 of merchandise on time were charged to the account of John Smith, when it should have been charged to William Jones. The correcting entry will be

William Jones	5 00	
John Smith		5 00
Correcting an error on July 5 in charging a sale to Smith instead of Jones		

In the memorandum space of the original entry, there should be a reference to the correcting entry as follows: "Corrected by entry July 5"

**7. Journal Memoranda for the Books of the Valley Furniture Store.** — In the various journals for the transactions in January, the student will not be required to copy the detail either from the purchase invoices or from the sales slips. The Valley Furniture Store will be assumed to keep a set of purchase invoices numbered serially to which it can refer by num-

ber in the purchase journal and on the credit side of the cash journal. The sales slips are also filed serially and referred to for detail in the sales journal. This reference to the original basis of the entry will serve for memoranda in entering the January transactions. There should always appear on the credit side of the cash journal the name of the payee and the check number for each payment. If the name of the payee is the account also, it need not be entered in the memorandum space. In any case, the check number should appear to the right of the center line dividing the account space from the memorandum space. The sales slip number and the invoice number would appear in the same place in the sales journal and in the purchase journal, respectively.

**8. Ledger Memoranda.** — Discount terms should always be entered in the memorandum space of the ledger account. As indicated in Chapter VI, the special journals for sales and purchases are frequently so combined with the invoices, that a page reference is also a reference to the original invoice. When a note payable is made or a note receivable is received, there should be entered in the memorandum space of the general journal, the rate of interest, the due date, the name of the maker, the name of the indorsers, and the date of the note. When a special bill book for notes receivable and notes payable is used a reference to this book may displace the detailed memoranda. The general principle is that the journals should either have in them full information about each transaction or should refer to original records which are readily accessible for full information. If it is feasible to make the original records serve as journals, this is desirable. The ledger, on the other hand, should have a reference to the journal and such information as the business will require in connection with settling and receipting for accounts.

The summary accounts made for the purpose of showing profits and the condition of the business, have full memoranda in the ledger and also refer to the journal. When these accounts are referred to by the manager or others who may be interested, the name of each account appearing on the debit or

credit side of the trading account, the profit and loss, or the balance sheet is needed to convey the meaning of the summary

### 9. Transactions for January.

January 1, 1914 To provide working capital, Mr Frank Williams invests \$5,000 00 cash in addition to the assets taken over from the Urban Furniture Co

January 2 It is assumed in the January transactions that all money received is deposited in bank The cash journal, consequently, takes the place of an account with the bank

Goods are ordered from the Haywood Furniture Co to the amount of \$1150 00, and a duplicate of the order is duly filed (No entry is made at this point) Bills are paid as follows

Check # 1	John Smith for 2 tons Oklahoma coal	\$14 00
Check # 2	Chester Allen rent of store	100 00
Check # 3	Corner Book Store, for stationery	20 00

January 3 Pay the following bill with Check # 4

J P Johnson for shoeing horses and repairs to wagon \$12 00

The goods ordered from the Haywood Furniture Co on the 2nd arrive together with the invoice Terms  $2\frac{1}{2}\%$  10 days, net 30 days, invoice #1

(The goods as received are checked up with the invoice in order to detect any discrepancies The purchase of the goods is then recorded in the Purchase Journal The terms quoted mean that the account is payable in 30 days, but that a discount of  $2\frac{1}{2}\%$  from the face of the invoice will be allowed for payment within 10 days from the date of the invoice Since there is no assurance that the discount will be taken, the purchases are entered at the face of the invoice)

January 4 The store is opened for business and the following sales are made

To H R Caldwell, sales slip #1 \$45 00

Terms  $3\frac{1}{2}\%$  10 days, net 30 days

To H P Square Business College, sales slip #2, \$125 00

Terms Net 30 days,  $8\frac{1}{2}\%$  interest after 30 days

January 5 Cash sales for the day are \$130 00 — Sales slips #3-6 (One entry for the daily cash sales is sufficient) Allowance is made for damage on the H P Square Business College order, \$20 00

Mr Williams withdraws Cash, \$50 00 (check #11) (Charge to Frank Williams, Personal)

(Full details of each sale may be placed in the journal, but the better business practice is to make out the sales slips in duplicate, filing one copy. The explanation in the journal may then be merely a reference to the number of the sales slip and a statement of the terms of the sale.)

January 5 Pay the Haywood Furniture Co, check #5 their bill of January 3, taking the discount

(The check is made out for \$1127 00. By the payment of this amount a debit of \$1150 00 is canceled. An analysis of the transaction shows that a liability to pay a creditor \$1150 00 has been canceled, that the asset Cash has been reduced \$1127 00, that for prompt payment a reward of \$23 00 has been earned. In the form of a journal entry the analysis becomes

The Haywood Furniture Co	\$1,150 00	
Cash		\$1,127 00
Discount on Purchases		23 00

Since the transaction involves the payment of cash, it is not logical to make the entry in the journal. If the cash element of the transaction is entered in the Cash Journal and the discount in the General Journal, the debit to the Haywood Furn. Co. is split into two parts. If the transaction is considered as a payment of the face of the bill to the creditor, and a refund of the amount of the discount from him, the journalization becomes

The Haywood Furniture Co	\$1,150 00	
Cash		\$1,150 00
Cash	23 00	
Discount on Purchases		23 00

In this form the transaction can be entered in full in the Cash Journal. It is evident that the difference between the cash credit and the cash debit is \$1127 00, the amount of the check. For convenience in auditing the books, the amount of the check should be stated in the explanation space in the credit entry, and reference made to the debit entry. In the later months this somewhat cumbersome arrangement will be avoided by the use of special columns.)

Pay the weekly payroll with checks No. 6010.

Charge part of payroll to administrative salaries and part to selling salaries

January 6 The St Luke Hospital pays on account, \$500 00  
They also purchase, sales slip #7, beds amounting to \$100 00 H R Caldwell pays his bill of Jan 4, taking the discount of 3%, amounting to \$1 35

(Read the explanation on Jan 5 again, and make a similar analysis of this transaction Notice that in this case the discount is a Discount on Sales and is, therefore, a loss to the business )

Purchase on account from the Sample Furniture Co for office use the following

2 high chairs at \$5 00	\$10 00
2 high desks at \$20 00	40 00
1 high stool	2 00
Terms 2% 10 days, net 30 days	
	\$52 00

January 8 Purchase on account from the Cross Farming Co a pair of mules for delivery service, \$400 00

Sales for the day

Cash sales (one entry) Sales Slips #8, #9, #10 — \$125 00

Credit Sales

Foster Hall, Sales Slip #11, Dining room set	\$40 00
Miscellaneous rugs	35 00
	\$75 00

January 9 A rug sold to Foster Hall on the 8th is returned for credit, \$20 00

Frank Williams purchased at cost for his personal use rugs costing \$50 00 (Charge to Frank Williams, Sales Slip #12 )

Personal and credit to Mdse Purchases Paid interest due on notes payable, \$80 00 Also paid the note of \$1 000 00 Check #12 covers both transactions ( Although one check covers both transactions, separate entries are required in the Cash Journal ) Buy hay for \$20 00, paying cash (Check #13 ) Mr Williams increases the capital invested in the business by \$500 00, cash

January 10 Cash Sales

Sales slip #13	\$15 00
Sales slip #14	10 00
Sales slip #15	12 50
Sales slip #16	8 00
	\$45 50



## January 10 Credit Sales

Sales slip #17	Bagdad University	\$40 00
Sales slip #18	J H Brigham	30 00
Sales slip #19	H R Caldwell	20 00
		00

## Receipts on account

Bagdad University, account of Jan 10, 1913, \$2,000 00 This account had run for one year after it was due and bore interest after maturity at the rate of 6% per annum The interest, amounting to \$120 00, is paid as well as the amount of the account

## January 11 Make payments on account as follows

Sheboygan Chair Co, Check #14	\$2,400 00
Michigan Bed Co, Check #15	1,000 00

## Cash Sales

Sales slip #20	32 00
Sales slip #21	26 00
Sales slip #22	35 00

Goods on sales slip #20 are damaged in delivery to the amount of \$25 00 Refund for this amount is made in cash (check #16)

## Credit Sales

Sales slip #23	H R Scott	\$33 00
Sales slip #24	J Collins	18 00
Sales slip #25	William Wood	55 00

Terms in all cases, 2% 10 days, net 30 days

(Since the terms quoted above are the usual terms of sale in this business, they will be called regular terms hereafter)

January 12 Make an agreement with the Stechert Advertising Agency to have five insertions in the Valley News at \$50 00 per page Pay for a half page insertion \$25 00 (Check #17)

Frank Williams draws for personal use, \$50 00 (Check #18)

Pay taxes, \$275 00 (Check #19)

Pay the personal taxes of Frank Williams, \$125 00 (Check #20)

The St Luke Hospital sends a check for \$98 00 in settlement of their bill of Jan 6 As the terms of sale did not provide for a cash discount on this bill, the check is returned (No entry required)

## Cash Sales

Sales slip #26	\$34 00
Sales slip #27	19 00

## Credit Sales

Sales slip #28	William Day	45 00
Sales slip #29	R H Thompson	15 00
Sales slip #30	R P Henderson	

Terms Regular in each case (2% 10 days, 30 net)

The St Luke Hospital sends a check for \$100 00, which is accepted

January 13 The Sample Furniture Co is closing out business. Take advantage of the low prices offered on their stock to order the following goods, terms settlement on delivery Order merchandise to the amount of \$1,850 00 (No entry required at this time)

January 13 Cash Sales

Sales slip #31	\$25 00
Sales slip #32	17 50
Sales slip #33	22 00
Sales slip #34	38 00
	\$102 50

Credit Sales

Sales slip #35 J Collins	\$25 00
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Terms, 3% 10 days

Sales slip #36, H R Caldwell	30 00
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Sales slip #37, J H Brigham	30 00
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Terms, regular in both cases

Pay the weekly payroll (checks #21-25)

January 15 The goods ordered from the Sample Furniture Co arrive (invoice #2) The order for the five dining room sets costing \$200 00 could not be filled and this portion of the order is canceled The delivery of the 30 fumed oak chairs for \$300 00 is delayed Credit the Sample Furniture Co for goods delivered Arrange for the payment of this account as follows cash, \$1 000 00 (check #26) balance note without interest at 30 days

Receipts on account as follows

J H Brigham	\$400 00
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H R Caldwell, bill of Jan 10	20 00
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J Collins, bill of Jan 11 (less \$ 36 discount)	18 00
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Note

From this date the sales are listed and entered at the end of each week for the purpose of abbreviating the number of entries It must not be forgotten that in actual business sales would be made and entered daily

The freight bill for the first two weeks in January, amounting to \$125 00, is presented by the Valley Central Railroad Pay by check #27 (Freight is part of the cost of merchandise purchased) After the payment is receipted and entered, an error of \$10 00 is discovered in the bill and a cash refund of this amount is secured Receive on account from K C Riley, \$200 00

January 16 The following bill, dated Jan 10, is paid with check #28

To A B Kirk, Dr

Painting of sign (advertising)	\$10 00
Painting of Store	75 00
	\$85 00



January 17 Frank Williams draws \$25 00 as an advance on salary due at the end of the week (Check #29)

January 18 The Clerk discovers that the \$200 00 credited to K C Riley on the 15th should have been credited to the Rice Mfg Co

Buy an Underwood typewriter from the Underwood Company, price \$102 50

Buy from the Corner Book Store for cash (check #30) 50 carbons for \$1 50 and 1000 letter heads for \$5 00

January 20 Cash sales for the week are \$870 00

Credit sales as follows

#43, Hotel Bismarck	\$150 00
#44, H P Square Business College	90 00
#45, Bagdad University	325 00

Terms net 30 days in each case

#46, J H Brigham	25 00
------------------	-------

Terms 3% 10 days, net 30 days

Pay the weekly payroll checks #31-35 (Remember the advance payment made to Frank Williams)

The chairs on the Sample Furniture Co order of January 13th arrive to-day, invoice #3 Pay by check #36 (Enter in Purchase Journal and Cash Journal Check in both so that no posting will be required)

Receive from H R Scott check for bill of January 11, less discount

January 22 Pay the Stechert Advertising Agency for four additional half page insertions in the Valley News according to the agreement of January 12th (Check #37)

J R James is dismissed from service Pay him \$5 00 (check #38) for the day's service

Engaged Floyd Jones as clerk at \$30 00 per week beginning January 24th

Pay the Rapid Repair Co \$15 00 for repairs on the furniture bought from the Sample Furniture Co, and charge the amount to the Sample Furniture Co (check #39)

Pay the Rapid Repair Co \$25 00 (check #40) for repairs to the store fixtures

Receive on account checks as follows

R H Thompson, bill of Jan 12, less discount

R P Henderson, bill of Jan 12, less discount

(These checks are accepted since they were mailed within the discount period)

January 24 Receive payment on account as follows

Bagdad University \$180 00

J Collins, bill of Jan. 13, less discount

H R Caldwell, bill of Jan 13, less discount

January 25 In counting the cash for the day there was found an excess of \$1 00 above the amount shown by the record of receipts and sales

(It is usual to open an account Over and Short to care for cash discrepancies Amounts in excess of the recorded receipts are credited to this account, amounts under the recorded receipts are debited to Over and Short At the end of the month the account is closed into Profit and Loss )

January 26 Frank Williams invests \$1000 00 in the business

January 27 Frank Williams' personal grocery bill of \$35 00 is paid by check #41

Buy the lot and building in which the business is conducted for \$6000 00, paying \$3000 00 in cash (land, \$2000 00, building, \$1000 00) (check #42), and making a five-year 8% note, payable to R H Jones, for the balance Interest on the note is to begin on Feb 1, 1914, and is to be paid semi-annually, May 1 and Nov 1 A cash allowance of \$10 00 is received for rent paid this month

January 27 Cash sales for the week, \$483 00

Credit Sales

#51, Bagdad University	\$65 00
#52, J H Brigham	235 00
#53, H R Scott	428 00
#54, St Luke Hospital	160 00
#55, J Collins	120 00

Terms Regular in each case, except the Bagdad University bill is 30 days net

Pay the weekly payroll (Checks #43-47 )

(Floyd Jones is paid for the actual time employed )

January 30 Buy a burglar-proof safe from the Lacy Lock & Safe Co for \$150 00, terms 2% 10 days, net 30 days

## CHAPTER VIII

### PETTY CASH

1. **Petty Cash Book.** — The cash transactions of a business are more readily checked if all money received is deposited in a bank and all money expended is paid out by check. The canceled check is better evidence of the amount paid out than even a signed receipt, the check automatically becoming a receipt through the endorsement of the payee when the cash is secured.

It is more convenient, however, to pay small amounts for express, telegrams, and other sundry expenses over the counter in cash. As these small amounts are expended, a receipt for them should be taken and deposited in the cash drawer or in a lockable money box. When the fund set aside for these petty expenses is exhausted, it is renewed, the process being repeated as often as may be necessary. If the fund is created and replenished by check, even the petty expenses of the business may be made to pass through the bank.

If the petty expenditures are small in amount and volume, no book at all need be used to record them. The receipts themselves serve as evidence of payment and as vouchers showing what accounts should be charged. If the payments are frequent, however, and large in the aggregate, they should be entered in a special book known as the Petty Cash Book.

2. **Imprest System and Associated Journal Entry.** — In the imprest system, this book is used simply as a memorandum cash journal to place in permanent form a record of the receipts and disbursements of petty cash. The creation of the fund is accomplished by the following journal entry:

Petty Cash	100 00	
Cash		100 00
Setting aside of \$100 00 for petty cash		

Let us assume that this fund is replenished on the first of each month, and that the expenditures for January are as follows: cartage, \$35 00, postage, \$40 00, general expense, \$20 00. On February 1, a check would be drawn to cover these items, and the latter entered on the credit side of the cash journal. From the cash journal, the items would then be posted to the debit side of the proper accounts. After the first charge, therefore, there is no debit or credit to petty cash.

When petty cash is handled in this way, the clerk in charge should at all times have in his fund either the cash charged to him or the receipts which, added to the balance on hand will equal the amount originally charged. To guard against possible shortages the fund should be audited at least once each month.

**3. Petty Cash Journal** — The petty cash book is sometimes used as a book of original entry, thus becoming one of the journals of the business. This method involves successive debits and credits to the petty cash account. The account is charged on the cash journal, not only with the original check creating the fund, but with all subsequent checks to renew it when depleted. The expenditures, on the other hand, are charged directly from the petty cash journal to the proper expense accounts and credited to petty cash. This division of the cash record into two books of original entry might result in serious inconvenience, especially when the keeper of the petty cash is not located in the same building with the keeper of the regular cash journal, and accounts for the common use of the imprest system.

The form of the petty cash book or journal and the method of entry are illustrated on pages 108-109.

#### TRANSACTIONS FOR ILLUSTRATION NO. 13

- 1 Received check No. 45 for \$100 00 to be used for petty cash
- 2 Paid on a collect telegram \$1 25
- 3 Paid out for postage \$5 00
- 4 Spent for sundry office supplies \$7 50.
- 5 Paid for drayage \$2 50
- 6 Donated to charity \$5 00
- 7 Paid for carriage hire on official business \$1 50.
- 8 Paid out for express charges \$1 35

ILLUSTRATION NO 13

PETTY CASH BOOK

(For transactions recorded in this illustration, see page 107 )

PETTY CASH

DATE	RECEIVED	DATE	EXPLANATION	PAID	EXPRESS	DRAVAGE	OFFICE SUPPLIES	GENERAL EXPENSE
1919 July		1						
	100 00	2	Telegram	1 25				1 25
		3	Stamps	5 00				5 00
		4	Sundry Supplies	7 50				
		5	Drayage	2 50		2 50	7 50	
		6	Charity	5 00				5 00
		7	Bus Fare	1 50				1 50
		8	Outgoing Express	1 35	1 35			
		9	Balance	24 10	1 35	2 50	7 50	12 75
	100 00			75 90				
				100 00				
July		10						
	75 90	11						
	24 10							

ILLUSTRATION 13A

PETTY CASH JOURNAL

(Form same as above except for closing as below )

PETTY CASH

DATE	RECEIVED	DATE	EXPLANATION	PAID	EXPRESS	DRAYAGE	OFFICE SUPPLIES	GENERAL EXPENSE
1919 July	1	1919 July	2 Telegram	1 25				12 5
			3 Stamps	5 00				50 0
			4 Sundry Supplies	7 50				
			5 Drayage	2 50		2 50	7 50	
			6 Charity	5 00				
			7 Bus Fare	1 50				50 0
			8 Outgoing Express	1 35	1 35			15 0
				24 10	1 35	2 50	7 50	12 75
		July	10 Express	1 35				
			Drayage	2 50				
			Office Supplies	7 50				
			General Expense	12 75				
			Petty Cash		24 10			
				24 10	24 10			
		July	10 Paid Out	24 10				
			Balance Cash	75 00				
				100 00				
July	10							
July	11							

Under the imprest system, after entering the transactions in the petty cash book, as shown, the petty cash clerk forwards to the cashier the receipts for the amounts expended, together with a memorandum or voucher attached giving a summary of the expenditures, as follows

Express	\$1 35
Drayage	2 50
Office Supplies	7 50
General Expense	<u>12 75</u>
	\$24 10

Upon receipt of the charges, the cashier enters them on the credit side of the cash journal, and sends to the petty cash clerk a check for the full amount. When entered on the petty cash book, the check restores the petty cash to its original amount.

If the petty cash book were used as a journal, the items of expense would be brought down in the explanation column with the amounts in the paid column to the right. The charges would then be posted to the different accounts, and the ledger page entered in the folio column, as in the case of other journal postings. The folio column would, of course, be useless if the book were used merely as a memorandum under the imprest system, already described.

When the petty cash book is used as a journal the original charge to petty cash appears in the cash journal. If the petty cash clerk reports the journal entries arising out of the petty cash journal for the purpose of closing or furnishes these journal entries to the keeper of the general ledger, the petty cash account in the general ledger would be credited with the total of the amount charged to the several expense accounts. The petty cash account would then have a balance differing from the original charge to the account. In any case, the credit to petty cash should be posted from the petty cash journal at the same time the several expense accounts are charged. When the cashier issues a check to reimburse the petty cash clerk the petty cash account would be charged again in the general cash journal at the same time the cash account is credited.

for the amount of the check issued. It is more usual and also the preferable usage to make the petty cash book a memorandum book and the only charge to the petty cash account under such usage is the original charge made when the fund is created. The charges to the expense accounts covered by the expenditures of the petty cash clerk are then entered in the general cash journal at the same time that the check is issued to reimburse petty cash. That is, the cash account is credited and the expense accounts charged so that the petty cash account stands as it was at the beginning of the fund.

### PROBLEMS AND QUESTIONS

For the following problems, the student should rule a letter size page for petty cash.

1. Enter the following data in the Petty Cash Book using it as a petty cash memorandum book. Enter the expenditure under the following account headings: express, cartage, delivery expense, general expense.

1919

- June 1 Received from the cashier \$100.00 to be used as petty cash, the petty cash journal to be turned over to the ledger clerk at regular intervals for posting to the ledger.
- 2 Paid for repairs to office fixtures, \$2.50
- 3 Purchased stamps for cash, \$5.00
- 4 Paid charges on collect telegram, \$1.25
- 5 Paid for dravage, \$3.50
- 6 Paid for express charges, \$4.50
- 7 Paid for repairs to fixtures, \$5.00. Settled with the Valley Blacksmith for the following: Shooing of horses, \$2.50, welding of tires, \$5.50, other repairs to wagon, \$4.75.
- 8 Purchased hay for delivery team, \$5.00
- 9 Purchased fuel for use in store, \$5.25
- 10 Make up a statement for the cashier, covering receipts for expenses to date, and close the petty cash journal.
- 12 The cashier reimburses petty cash for the total expenditures reported. Journalize the items showing the debits and credits for items going into the regular Cash Journal.
- 2 Journalize the items of the Petty Cash Book as of June 12 as they would be journalized if the Petty Cash Book were used as a journal. Indicate how those journal entries should be made in the Petty Cash Journal.



## CHAPTER IX

### APPORTIONMENT OF EXPENSES TO APPROPRIATE PERIOD — DEPRECIATION AND REPAIRS

**1. Definition of Expense.** — Expense accounts have already been referred to as the debit balance group of the revenue accounts. They tend to decrease proprietorship or capital, while the income accounts, the other group of revenue accounts, have precisely the opposite effect.

It frequently becomes necessary to determine whether a certain outlay is an asset or property expenditure or an expense. This can be done only by considering it in connection with the particular period in hand. Thus, if \$500.00 is spent for fuel, the purchaser secures an asset worth \$500.00. If the fuel so purchased is used in heating the store building for the month of January, a summary of the expenses for that month must include the \$500.00. If, however, only one fourth of the fuel is used for the month of January, then only \$125.00 of the fuel outlay can be regarded as expense for the month of January, the balance constituting an asset expenditure at the close of the month.

Expenditures for merchandise are treated in precisely the same way. A business purchases, we will say, \$10,000.00 worth of goods during the month of January. During the month, however, only half of the goods are sold. Consequently, only \$5,000.00 of the outlay can be counted as an expense, to be charged against the sales in the calculation of the profits for the month of January. The remaining \$5,000.00 worth of merchandise is an asset, and is scheduled as such in the balance sheet at the close of the month.

If the question is asked, therefore, whether a certain expenditure is an asset or expense, it must be determined whether the outlay is a part of the cost of securing the income for the

definite period under consideration. If entirely used up in securing this income, the whole outlay becomes an expense. If only partly used up, the part so expended becomes an expense, the remainder constituting an asset at the close of the period.

**2. Supply Inventories.** — The merchandise on hand at the close of a period has been scheduled as the merchandise inventory. Supplies such as fuel, stationery, stamps, etc., are simply inventories of another kind, and may be styled supply inventories. Just as credit is taken in the merchandise and trading accounts for the merchandise on hand at the close of a period, so credit must be taken for the final supply inventories in closing the expense accounts. Thus, if the \$500.00 outlay for fuel referred to above has been charged to expense, credit for the \$375.00 unexpended on January 31 must be taken by journal entry, as follows

Supply Inventories — Fuel	375 00	
Expense		375 00
Credit for supply inventories		

The remainder of the expense account is, of course, a pure expense, and is closed into profit and loss by the following journal entry

Profit and Loss — Expense	125 00	
Expense — Profit and Loss		125 00
Closing of Expense into Profit and Loss		

By these two journal entries, therefore, there has been a correct apportionment of the \$500 fuel outlay between assets and expense for the period ending January 31.

Although there can never be a correct statement of net profits without an apportionment of expenditures between assets and expense, a business may neglect to take credit for supplies on hand if the total supplies purchased have been practically used up for the period under consideration. In some instances, the total supplies on hand never constitute any considerable item at any time throughout the period. This might be true of stationery and stamps. In such instances, also, a business may legitimately fail to take credit for a small unused balance.

In many accounting texts, the apportionment between assets and expense is referred to as an apportionment between capital expenditures and expense. It is fair, however, to question the appropriateness of this terminology, since an asset expenditure may leave capital unaffected, whereas an expense outlay always tends to decrease capital. True, the word *capital* is frequently used in economics as synonymous with assets, but in accounting there should be a consistent use of terms and a precise definition of them. In the interest of clearness, therefore, business outlays should be referred to as asset expenditures or as expense.

**3. Definition of Depreciation.** — Certain assets, frequently called fixed assets, such as houses, land, office equipment, factory machinery, etc., are secured to furnish the necessary facilities for the conduct of the business. One is accustomed to think of these as durable assets — as assets not used up in the ordinary conduct of the business — and to think of expenditures for them as asset expenditures.

While these particular assets are not used up so rapidly as supplies, still they are used up over a longer or shorter period of time, thus becoming an expense of operation for the period over which they are used. Thus, if a typewriter costing \$100.00 lasts ten years, the \$100.00 outlay becomes a charge to expense. If the business is calculating profits for a one-year period only, manifestly only one tenth of the amount, or \$10.00, should be charged to this account, for, if the loss of the asset, which is equal to the cost of the asset, were charged entirely to any one year, the other nine years would fail to bear their proportionate cost of the profit arising from the use of the typewriter in question. The cost of the typewriter should, consequently, be equitably distributed over the ten-year period in charging the loss of the asset to expense. This process of charging a fixed asset to expense over the period of the life of the asset is called depreciating the asset, or the depreciation of the asset.

**4. Causes of Depreciation.** — The causes of depreciation of a fixed asset are as numerous as the factors affecting the life of the asset itself. The causes generally considered are wear and tear, obsolescence, inadequacy, and accident.

If the type of machinery and tools used in a factory did not change from year to year, the life of these assets would be marked by the period of their usefulness as determined by ordinary wear and tear. This period of usefulness is frequently shortened, however, by the appearance of improved machines and tools. If such later types reduce the expense of production by an amount in excess of an adequate return on the investment involved in their purchase and installation, the earlier types are discarded as obsolete.

A tool or machine may also become worthless for purposes of operation because of inadequacy long before its usefulness is destroyed through wear and tear. Thus, a certain switchboard may provide satisfactorily for all of the telephones that can be attached, but the growth of the community may have been such that the old switchboard must be discarded for a new one equipped for a larger service. In other words, the old switchboard has become inadequate, and its life has been shortened materially by reason of this inadequacy.

The life of an asset is also frequently shortened by fire or flood, or by some other accidental, providential, or fortuitous circumstance. There are doubtless other possible causes, but those mentioned will suffice to show the nature of depreciation.

**5. Depreciation and Price Reductions** — Frequently the value of an asset is reduced through a lowering of the cost price. For instance, after a machine has been in operation for a year, the price of the machine may be so reduced that a new one could be installed for half the original cost. The question therefore arises as to whether there should be set up a depreciation charge of half the cost of the old machine. If the definition already given of depreciation is the correct one, it is clear that there has been no depreciation. The old cost must be properly distributed over the useful life of the asset, regardless of what the cost of the new asset may be. In other words, the amount of expense that is to be occasioned by the purchase of an asset is determined at the time of the purchase. A lower price at a later date has nothing to do with the original expense or with its proper distribution. The reduction in the price of

assets is a question to be considered in connection with the valuation of assets, to be treated in a subsequent chapter.

**6. Methods of Charging Depreciation.** — An asset may be entirely worthless at the expiration of its useful life in a business, or it may have a value as scrap. The scrap value of an asset is its value for purposes other than those of the business by which it is owned, or its value on the market apart from the going concern for which it was purchased. As this scrap value cannot be definitely fixed until the asset is sold, the depreciated asset is carried on the books of the concern at an estimated market price. The original cost of the asset less the scrap value may be designated as the use value of the asset. There are several well-known methods of charging this use value to expense. Chief among these are the straight-line charge, the charge of a constant per cent of the diminishing value, and the sinking-fund method.

**7. Straight-line Depreciation.** — This method involves a charge for depreciation each time the books are closed in connection with the calculation of profits. As the books are usually closed at regular intervals — monthly, quarterly, semiannually, or annually — the use value of the asset is divided by the number of such periods which mark its useful life, the quotient representing the amount to be charged as depreciation at the close of each succeeding period. Thus, if the use value of a machine is \$400.00 and the period of useful service is ten years, an annual depreciation charge of \$40.00 must be made at each successive yearly closing. This is the method most commonly used.

**8. Constant Percentage of Diminishing Value.** — The straight-line method is sometimes criticized because it does not accomplish what at first thought it seems to accomplish. It seems to distribute the cost of the asset equally over the periods of its use. This purpose, however, is defeated by reason of the fact that repairs to the asset cost more each year as the end of its useful life is approached. In other words, this constant increase in the cost of repairs results in a gradually increasing charge in connection with the service furnished by a given asset.

To meet this defect, it has been suggested that a charge of a certain constant percentage of the diminishing value of the asset should be made at the close of each period until the entire use value of the asset has been charged off for depreciation. For example, if a machine costing \$500 00 has a residual or scrap value at the end of six years of \$131.08, an annual depreciation charge of 20% of the diminishing value of the machine is made. The yearly charges are as follows

Value	Depreciation	Residual Value
\$500 00	\$100 00	\$400 00
400 00	80 00	320 00
320 00	64 00	256 00
256 00	51 20	204 80
204 80	40 96	163 84
163 84	32 76	131 08

This method of depreciation accomplishes the desired purpose only when the annual increase in the cost of repairs is equal to the annual decrease in the depreciation charge. It is not to be expected, of course, that there will be an exact equality, but, unless the two quantities are approximately equal, this method is not far superior to straight-line depreciation.

The percentage of diminishing value to be applied in the method under consideration may be derived as follows

Let  $V$  = the original cost of the asset

$R$  = the residual value

$d$  = the rate of depreciation which will reduce  $V$  to  $R$  in  $n$  years

$n$  = the number of years of useful life of the asset

Then  $V - dV$  = residual value at the end of the first year

$V - dV - d(V - dV)$  = residual value at the end of the second year

$V(1 - d)^2$  = residual value at the end of the second year

$V(1 - d)^n$  = residual value at the end of the  $n$ th year

$V(1 - d)^n = R$

$(1 - d)^n = R/V$

$1 - d = \sqrt[n]{R/V}$

$d = 1 - \sqrt[n]{R/V}$

Thus the rate of depreciation to be applied to the residual value of an asset each year to charge off the use value of the asset in  $n$  years is one minus the  $n$ th root of the final residual or scrap value divided by the original value or cost. This equation is easily solved in a given case by the use of logarithms. Substituting in this equation the figures from the example given above, we have

$$d = 1 - \sqrt[n]{131.08/500.00} = 20\%$$

**9 Repairs and Depreciation.** — Depreciation is sometimes defined as the wear that cannot be repaired. Regular and skillful repairs frequently lengthen the period of usefulness of an asset, and the failure to make such repairs often results in a more rapid depreciation of the asset. This close relation between depreciation and repairs suggests the possibility of charging each year for depreciation and repairs an amount sufficient to provide for both these items. The balance not spent for repairs may then be charged to depreciation. This method of providing for depreciation can be used to make constant during the life of the asset the cost of the services rendered by it, without at the same time obscuring the actual expenditures for repairs.

Let us suppose that the residual or scrap value of a machine costing \$600.00 is \$100.00 at the end of five years, and that a fair estimate of the average annual cost of repairing the machine is \$30.00. Then the total cost of securing efficient service from the machine for the five-year period is \$650.00, or an average cost of \$130.00 a year. During the first year, the repair bill would of course be small, possibly not more than \$20.00, while the charge for depreciation would be relatively large, or \$110.00. During the fourth year, the repair bill would probably be about \$40.00, whereas the depreciation charge would be reduced to \$90.00. Thus the total annual charge for both depreciation and repairs remains unchanged.

**10. Depreciation Reserve** — The first method of journalizing depreciation that suggests itself is to debit depreciation and to credit the account of the depreciating asset. Thus, if delivery

equipment were the asset in question, and the amount of the depreciation charge were \$40 00, the journal entry would be:

Depreciation	40 00	
Delivery Equipment		40 00
Record of depreciation of delivery equipment		

The chief objection to this method of entering the depreciation charge is that it destroys the record of the original cost of the asset as contained in the asset account. In practice, therefore, the charge is credited to an entirely new account, known as the depreciation reserve, which must be considered in connection with the asset account to obtain the correct current value of the asset. For this reason, the depreciation reserve is commonly called an offset or valuation account, its balance indicating the amount by which the current book value of the corresponding asset is overstated. The effect of the depreciation reserve is simply to hold the offset in suspense until the preparation of the balance sheet, when the current value of the asset is shown as the difference between the original cost and the depreciation reserve.

The better method of journalizing the depreciation of the delivery equipment, therefore, is to debit depreciation and to credit the depreciation reserve of the particular asset, as follows:

Depreciation	40 00	
Depreciation Reserve for Delivery Equipment		40 00
Record of depreciation of delivery equipment		

If the original cost of the equipment was \$250 00, the current value of the asset is entered in the balance sheet in the following manner:

### JOHN SMITH

Balance Sheet, December 31, 1918

<i>Assets</i>		<i>Liabilities</i>	
Sundry Assets	\$7250 00	Sundry Liabilities	\$160 00
Delivery Equipment		John Smith, Capital	7000 00
ment	\$250 00		
Less Depreciation Reserve	40 00		
	<u>210 00</u>		
	\$7460 00		<u>\$7460 00</u>



This method of handling the depreciation charge is applicable to straight-line depreciation as well as to the fixed percentage of diminishing value.

If depreciation and repairs are provided for in one reserve and by the same estimated charge, the charge is journalized as follows

Depreciation	110 00	
Depreciation Reserve		110 00
Charge of depreciation and re- pairs for one year		

At the time this entry is made, there would already exist on the books the cost of repairs for the period under consideration. If these repairs amount to \$40 00, they would be closed out by the following journal entry

Depreciation Reserve	40 00	
Repairs		40 00
Closing of repairs into depreci- ation reserve		

After this journal entry is posted, the balance of the depreciation reserve represents the total depreciation charge against the cost value of the asset in question.

If it is considered desirable for the profit and loss account to show separately the charges for repairs and for depreciation, this result can be accomplished by closing the original repairs account into profit and loss and at the same time making a corresponding offset to the depreciation reserve and the depreciation charge, as follows

Profit and Loss — Repairs	40 00	
Repairs — Profit and Loss		40 00
Closing of repairs into profit and loss		
Depreciation Reserve	40 00	
Depreciation		40 00
Allowance for repairs in the de- preciation charge and de- preciation reserve		

After the depreciation account is closed into profit and loss, the latter account would show separate entries for depreciation and for repairs. Obviously, these separate items might be combined into a single item, the separate entries becoming merely memorandum side entries, as follows:

Depreciation and Repairs	110 00
Depreciation	70 00
Repairs	40 00

This method of providing for both depreciation and repairs through a reserve is not commonly recommended in accounting texts, nor will it be found to be the common practice. It provides, however, a most satisfactory means of showing that depreciation is ordinarily greatest when repairs are lowest, and an unfailing method of equitably distributing the charge for the depreciation and maintenance of an asset over the period of its usefulness.

**11. Sinking-fund Method of Depreciation.** — It is questionable whether there is any method of depreciation that can properly be styled the sinking-fund method. A sinking-fund is usually set aside for purposes of replacement. The ordinary depreciation charge and the creation of a depreciation reserve result in a lessening, by the amount of the charge, of the profits to be added to capital or to be withdrawn from the business, the funds thus reserved from distribution being commonly used for the general purposes of the business rather than set aside as a special fund for the replacement of the depreciating assets. If the depreciation charge is to be set aside and allowed to accumulate, then the problem arises as to how much must be set aside each year and placed at compound interest in order to equal the original cost of the asset by the time its useful life is ended. As the interest on the fund is a part of the depreciation charge, the actual charge is composed of the annual installment plus the interest for the year on the amounts set aside in the past. Thus, if the charge for the year is \$250 00 and the interest on the funds already set aside is \$50 00, these items are placed on the books by the following journal entry:

Depreciation	300 00	
Depreciation Reserve		300 00
Charge of depreciation for the year		

The following additional entries must be made in connection with the fund itself.

Depreciation Fund Cash	250 00	
Cash		250 00
Setting aside of annual installment to depreciation fund		
Depreciation Fund Cash	50 00	
Interest		50 00
Credit to interest of income from depreciation fund		

Instead of being charged directly to the depreciation fund, the interest might be charged first to cash, and then credited to cash and charged to the depreciation fund. It is simpler, however, to treat the depreciation fund cash as a separate account and charge the interest directly to this account.

The discussion of a depreciation fund belongs to the chapter on funds, and is inserted here to avoid any confusion that might result from the use of the phrase *sinking-fund method of depreciation*. The purpose is to call attention to the fact that a special fund for depreciation is sometimes created in place of a depreciation reserve from profits to be used for the general purposes of the business.

**12 Scrapping an Asset.** — A depreciation reserve being set up to show the extent to which the value of an asset is overstated on the books, the asset is kept on the books at its original value until its useful life is over. When it wears out or is discarded for any reason, the asset account is credited for the original cost of the asset, and the depreciation reserve and the scrap account are charged, respectively, with the use value and scrap value. Since the purpose of the depreciation reserve is to denote an excessive book value, it follows that the depreciation reserve should be marked out at the same time this excessive value is marked off.

Let us suppose that a machine costing originally \$600.00 is worth only \$100 00 as scrap at the end of its useful life. Manifestly, scrap should be charged for \$100 00 and the depreciation reserve for \$500 00, and the asset account credited for \$600 00. In the journal, these operations would be entered as follows

Depreciation Reserve for Ma-		
chinery	500 00	
Scrap	100 00	
Machinery		600 00
Marking off the use-value of discarded machinery		

If a new machine were now purchased for \$750 00 from the Central Electric Company, the transaction would be recorded by the following journal entry

Machinery	750 00	
Central Electric Company		750 00
Purchase of machinery		

The fact that the machine is a replacement does not make the entry of its purchase differ from that of the ordinary purchase of machinery.

When no depreciation account is kept, a business frequently charges replacements to expense, just as it does outlays for repairs. While it is bad practice to neglect to keep a depreciation account, it is not bad practice to charge replacements to expense in amounts equal to the cost of the machines replaced when no depreciation account is kept.

**13. Extraordinary Repairs.** - The question may be fairly raised as to whether expenditures for repairs are an expense, since they do not entirely disappear in connection with the sale of merchandise. In fact, if all the depreciation in assets were charged off as expense, it would not necessarily be erroneous to charge repair expenditures to the corresponding assets. These small expenditures from year to year, however, amount to a smaller sum than the depreciation on the property, and charging them to expense merely decreases the amount

to be charged to depreciation. The total value of the property is, therefore, still less than it was when the asset was new.

If the repair items were large in some years, however, and small in others, there would be an unfair distribution of the expense of maintenance. This unfairness would be especially evident if some unusually large expenditure were required in any one year. For instance, in a boiler room the boilers need to be relined about once every five years. Since the expense of relining would be a large percentage of the total boiler-room expense, the cost of operations would be unfairly stated for the year to which such repairs are charged. This would, of course, not be the case if depreciation and repairs were provided for in one reserve, as indicated above. But, if only the depreciation not made good by repairs is provided for in the depreciation charge, then it becomes necessary to devote special attention to extraordinary expenditures for repairs, and to distribute them over several years, in order that the profits of a particular year may not be unreasonably small. In other words, the amount of the expenditure not charged to expense must be carried as an asset in what is known as a deferred expense account, an asset of this character being scheduled as a deferred expense. The account should contain a complete explanation of each item closed into it.

To illustrate, suppose that the extraordinary repair account debit balance is \$800 00, and that it is desired to defer \$600 00 of this amount. The journal entry would then be

Deferred Expense — Extraordinary Repairs	600 00	
Extraordinary Repairs--Deferred Expense		600 00
Charge of \$600 00 of extraordinary repairs to deferred expense		

The remaining \$200 00 of the extraordinary repairs account would, of course, be closed into profit and loss by the usual closing entry.

As the deferred expense account is opened only for the purpose of closing the books, the deferred expense charge is re-

versed when the books are opened again for the entry of the transactions of a subsequent period, thus

Extraordinary Repairs — Deferred Expense	600 00	
Deferred Expense — Extraordinary Repairs		600 00
Reversal of deferred expense entry made in closing		

By means of these entries, \$200 00 of the extraordinary repairs account has been charged to expense for the period affected by the closing. The remaining \$600 00 has been deferred for the purpose of distributing it over the succeeding years at the rate of \$200 00 a year.

The reversing entry item may, however, be avoided by regarding the account of *extraordinary repairs* as an asset account instead of an expense item, but as an asset the cost of which accrues as expense from year to year just as the cost of a machine gradually becomes expense through the depreciation charge as the machine wears out. If the \$200 00 referred to above were regarded as the part of extraordinary repairs which, at the end of the year, had become expense, this could be indicated by the following journal entry:

Repairs	200 00	
Extraordinary Repairs		200 00
Crediting the extraordinary repairs account with the amount chargeable to repairs for the period		

The balance of the *extraordinary repairs* account could then be carried down to the balance sheet and grouped with other similar items under the caption of *deferred expense*, but no reversing entry would be required. The same entry could be made at the end of successive periods until the whole of the original \$800 00 of extraordinary repairs had been charged to expense.

There are various other deferred expense items, such as insurance paid in advance, rent paid in advance, etc. All these items in closing follow the same treatment as expenditures for extraordinary repairs.

**14. Other Adjustment Items.** — There are other adjustment items at closing that ordinarily require attention. These are postponed to a later chapter.

**15. Replacing Parts of an Asset.** — Let us suppose that all the machinery of a boiler and engine room be considered as a unit in determining the depreciation charge and the credits to the depreciation reserve. The boiler in such a group of machinery may wear out at the end of five years and the engine at the end of ten years. The prevailing practice would require that the cost of the boiler be charged to the depreciation reserve and credited to the machinery account at the time it might be scrapped. The cost of the new boiler would also be charged to the machinery account and credited to the seller or cash according to the manner of purchase. Under such a program of purchasing separate units of machinery it is clear that at no time after the initial installation would the machinery all be new at the same time. It is also clear that there would constantly be to the credit of the depreciation reserve the estimated amount of depreciation, which had accrued on such machines as had been used for a period but had not worn out. This balance serves for valuation purposes to indicate the extent to which the cost of all these old machines exceeds what may be regarded as their fair going value.

A little consideration will also show that if an amount of cash were always set aside in a special fund equal to the charge for depreciation, there would always be an amount of cash on hand in this fund approximately equal to the credit balance of the depreciation reserve. If the depreciation estimate had been correct there would always be a large balance in the depreciation fund not required for replacement purposes unless all of the machinery should wear out at the same time.

In some instances one plant item, in its relation to depreciation, is like the boiler and engine group of machines. A distinct part of the item may be replaced without replacing the item as a whole. Railroad tracks are an illustration in point. If sixty feet of the track became worn while the rest were in good repair a special section might be replaced. Would the

cost of the special section be charged to a repair account under the heading *maintenance of way* or would it be charged to the depreciation reserve for railroad tracks? Since the practice would sanction a charge to *maintenance of way* the question arises as to the value of the reserve for depreciation since no charge would be made against it. If such a reserve were created it is clear that there would be soon accumulated an amount which would be sufficient to indicate the prevailing difference between the value of the railroad track after years of use as compared with the initial cost. Where such a situation should obtain there would cease to be any occasion for further charges to depreciation of track or of credits to the corresponding depreciation reserve. On the other hand, there is always the possibility of making the charge for depreciation large enough to cover all repairs and partial replacements. This policy would require that the cost of the repairs and replacements be charged against the depreciation reserve at the time of closing the books. In planning a system of accounts for any business there should be a consistent policy adopted in regard to repairs and depreciation so that the balance of the depreciation reserve may be relied upon as a reasonable statement of the amount of depreciation which has accrued on the assets still in use. If an item is not replaced in total at any time and its partial replacement from time to time is charged to repairs or maintenance, the question frequently arises as to whether it is worth while to make any depreciation charge against such an item, particularly if its condition is kept as good as new. If, in fact, the asset were kept as good as new, no depreciation would be necessary. If, on the other hand, it were maintained indefinitely by expense charged to repairs or maintenance, but at the same time after five years or more of use were worth only three fourths of the original value (assuming a stable price situation) then it would seem to be fair to spread the depreciation charge of one fourth the original cost over the years required for the depreciation in question to accrue.



## PROBLEMS AND QUESTIONS

- 1 Directions for the January closing
  - (a) Close the cash account with red ink closing and bring down the balance
  - (b) Take a trial balance
  - (c) Before closing any account into profit and loss, make journal entries and post to show the following items
    - (1) A depreciation reserve of 2% on delivery equipment, 1% on furniture and fixtures and  $\frac{1}{2}$  of 1% on building
    - (2) The loss through depreciation of a delivery wagon costing originally \$200 00 and having a scrap value of \$25 00
    - (3) A fuel inventory of one ton of coal costing \$7 00
    - (4) A stationery inventory of half the amount purchased during the month
    - (5) A deferred charge of half the advertising expenditures for the month
  - (d) Close through the journal all accounts which are closed into the trading account, and enter the merchandise inventory at the end of the period, amounting to \$22,631 40
  - (e) Close the trading account into profit and loss through the journal
  - (f) Close the revenue accounts by journal entry into the profit and loss account
  - (g) Close the balance of profit and loss by journal entry into the capital account
  - (h) Post all closing entries to the ledger accounts involved
  - (i) Make a balance sheet from the accounts left open on the books
  - (j) The personal accounts, the asset accounts, and the liability accounts not affected by the journal closing need not be closed, except in the case of an annual closing or in case of a transfer of the business, and the opening of a new set of books. The debit balances of these accounts should be written in pencil to the left of the last debit entry before the trial balance is made. The credit balance of any of these accounts should be placed to the left of the last credit entry before the trial balance is made
  - (k) All ruling of accounts should be done in red ink
  - (l) The capital account should be closed with a red ink closing
- 2 Explain what is meant by the depreciation of a fixed asset
- 3 On January 31, 1918, the Valley Grocery decides to set up a depreciation reserve of \$500 00 to cover depreciation of equipment and fixtures, and to set up a depreciation fund of the same amount. On July 31, 1918, there was scrapped a cold drink fountain costing \$250 00 and another purchased for \$300 00. On January 31, 1919, there had accumulated \$25 00 of interest to be turned into the sinking fund. Journalize all of these items so that they will be properly placed on the books

During the course of the year extraordinary repairs to the amount of \$150 00 became necessary, but half of this expense is deferred to the following year. Make the proper closing entries and the required opening entry for the extraordinary repairs account on February 1.

4. A machinery asset cost originally \$500 00. It is estimated that the machine will last four years and have a scrap value at the end of that time of \$100 00. If a constant rate of depreciation is applied to the diminishing value of the asset from year to year, what rate must be charged?

5. Suppose that the machinery asset just mentioned is to be depreciated by a constant charge each year for both repairs and depreciation, and that the total amount to be charged is \$600 00. For the first year the outlay for repairs is \$20 00, for the second year, \$25 00. Make the journal entries required at the close of each of the two years in connection with the depreciation and repair accounts.

## CHAPTER X

### CLOSING AND OPENING ENTRIES INVOLVED IN THE TRANSFER OF A BUSINESS

**1. Formal Closings.** — At stated intervals, such as once a year, along with an audit of the books, there is a formal closing of all the accounts kept by the business. For the purpose of calculating profits from time to time, there are frequently closings at shorter intervals. If an inventory is taken at these shorter intervals, all the accounts closing into profit and loss are closed through the general journal, and the cash account and the capital account in the usual way. The other accounts are ordinarily left open, with the balances in the memorandum spaces, as indicated in previous closings. If the business is transferred to a new concern and a new set of books opened, the accounts on the old books are closed by a general journal entry.

**2. Example of Closing** — Let us assume that John Smith, owner of the Urban Furniture Store, is to become a partner in the Valley Furniture Company through the transfer to the company of his individual business assets and liabilities, as follows:

#### URBAN FURNITURE STORE

BALANCE SHEET, DECEMBER 31, 1919

<i>Assets</i>		<i>Liabilities</i>	
Cash	\$500 00	Notes Payable	\$1,000 00
St. Luke Hospital	1,000 00	Sheboygan Chair Co.	2,400 00
Bagdad University	2,000 00	Michigan Bed Co.	1,000 00
Rice Manufacturing Co.	500 00	Wilson Carpet Works	2,100 00
Smith Institute	600 00	Haywood Furn. Co.	2,000 00
J. H. Brigham	400 00	John Smith, Capital	23,275 00
J. C. Riley	500 00		
Merchandise	22,275 00		
Fixtures	1,000 00		
Delivery Equipment	3,000 00		
	<hr/>		
	1,775 00		31,775 00

On the books of the Urban Furniture Store, the transfer of the assets is effected by the following journal entry

Valley Furniture Company	31,775 00	
Cash		500 00
St. Luke Hospital		1,000 00
Bagdad University		2,000 00
Rice Manufacturing Co		500 00
Smith Institute		600 00
J. H. Brigham		400 00
J. C. Riley		500 00
Merchandise		22,275 00
Fixtures		1,000 00
Delivery Equipment		3,000 00

Transfer of assets to Valley Furniture Company

If a separate cash book has been maintained for the cash transactions, the closing item is entered in both the cash book and the general journal, and checked in each of these books of original entry to indicate that no detail posting is required.

Similarly, the liabilities of the Urban Furniture Store are transferred by the following compound entry

Notes Payable	1,000 00	
Sheboygan Chair Co	2,400 00	
Michigan Chair Co	1,000 00	
Wilson Carpet Works	2,100 00	
Haywood Furniture Co	2,000 00	
John Smith, Capital	23,275 00	
Valley Furniture Company		31,775 00
Transfer of liabilities, including capital, to Valley Furniture Company		

The account with the Valley Furniture Company is, of course, opened merely for the purpose of showing that the business has been transferred to this new concern.

**3. Entry of Transfer on Books of Valley Furniture Company.**—There are several methods of entering the assets and liabilities taken over from John Smith in the formation of the new partnership relation. The simplest way is obviously to enter the assets as debits and the liabilities, including the capital, as credits to the Valley Furniture Company. This compound

entry is not only the simplest, but also the most reasonable entry, in view of the usual relation of debits and credits. When an asset comes into a business, the general rule requires that the asset account in question be debited and the account representing the source of the asset be credited, the liabilities representing the sources from which the assets are secured. The setting down of the assets, therefore, as debits and of the liabilities and proprietorship as offsetting credits for the journal opening is defensible, not only as the simplest method, but also as the most accurate representation of the important relation of assets and liabilities.

Accordingly, the transfer of the assets, liabilities, and proprietorship of the Urban Furniture Store is set up on the books of the Valley Furniture Company by the following journal entry:

Cash as per Cash Book	500 00	
St. Luke Hospital	1,000 00	
Bagdad University	2,000 00	
Rice Manufacturing Co.	500 00	
Smith Institute	600 00	
J. H. Brigham	400 00	
J. C. Riley	500 00	
Merchandise	22,275 00	
Fixtures	1,000 00	
Delivery Equipment	3,000 00	
Notes Payable		1,000 00
Sheboygan Chair Co.		2,400 00
Michigan Bed Co.		1,000 00
Wilson Carpet Works		2,100 00
Haywood Furniture Co.		2,000 00
John Smith, Capital		23,275 00
Taking over of assets and liabilities of		
Urban Furniture Store with John		
Smith as partner		

A question may be raised in regard to the cash entry in the general journal. The assembly of all the opening entries in one book of original entry, however, has distinct value, and the entry may be defended on this basis. It seems sound also on theoretical grounds, because the cash book represents not only

a book of original entry, but in addition a cash account **similar** to the ledger account of the same name

Another form of opening entry is frequently advocated by text writers. The purpose of this form is to stress the fact that the Valley Furniture Company has taken over the assets and assumed the definite liabilities of the Urban Furniture Store, and that the new partner's actual investment is the difference between the two. Consequently, the transfer of the assets and liabilities is under the second method journalized as follows

Cash as per Cash Book	500 00	
St. Luke Hospital	1 000 00	
Bagdad University	2,000 00	
Rice Manufacturing Co	500 00	
Smith Institute	600 00	
J. H. Brigham	400 00	
J. C. Riley	500 00	
Merchandise	22 275 00	
Fixtures	1 000 00	
Delivery Equipment	3,000 00	
John Smith, Capital		31,775 00
Transfer of the assets of the Urban Furniture Store		
John Smith, Capital	8,500 00	
Notes Payable		1,000 00
Sheboygan Chair Co		2,400 00
Michigan Bed Co		1 000 00
Wilson Carpet Works		2,100 00
Haywood Furniture Co		2,000 00
Assumption of the liabilities of the Urban Furniture Store		

If the charge and credit to John Smith, Capital, are posted, the balance of the capital account will be \$23,275 00 or the same as in the other form of entry.

**4. Opening Entries for Consolidation of Two Individual Businesses.** — In the example used above, it is assumed that the business of the Urban Furniture Store is transferred to the Valley Furniture Company and entered on the books of the latter concern. The Valley Furniture Company is thus

changed from an individual business to a partnership, though continuing to operate under the original firm name. If two individual concerns are consolidated and taken over by a new general partnership, each of the individual businesses is under the necessity of closing its books and making a formal transfer. On the books of the new firm, the transfer of the assets and liabilities of the old concerns is set up in the manner indicated in the preceding section. The assets and liabilities of each of the old firms are, of course, treated as separate entries, there being no consolidation of accounts of the same name until after a journal record of each transfer has been made.

**5. Capital Accounts of Partners.** — The books of a partnership are similar to those of an individual business, except that there are two or more capital accounts instead of simply one, and that the net profit item must be divided between or among the partners before being closed into the capital accounts. The closing entry of the profit and loss account, in the case of a credit balance, has in the case of an individual business been a debit of net profit to profit and loss and a credit to the individual capital account. In a partnership, the debit is the same, but the credit is in fixed ratios to the capital accounts of the several partners. As the profits and losses of a general partnership are divided equally, unless otherwise specified in the partnership agreement, a credit balance of \$300.00 in the profit and loss account is closed into the capital accounts of John Smith and John Doe by the following entry:

Profit and Loss - Net Profits	300 00	
John Smith, Capital		150 00
John Doe, Capital		150 00
Closing of profit and loss into capital accounts		

Withdrawals by the partners of cash or goods are charged to their separate personal accounts, which are later closed into their individual capital accounts, just as the personal account of the single owner is closed into the one capital account.

## CHAPTER XI

### APPORTIONMENT OF INCOME AND EXPENSE

**1. Definition of Accrued Income** -- Whenever an asset is received without the equal sacrifice of another asset, an income results. Although expense is generally incurred in connection with the receipt of such income items, the latter are closed as credits into profit and loss, the expense being also closed into profit and loss, but on the debit side. The credit balance of the account represents the net profits or the net income earned. In other words, income items are received subject to such expense deductions as may arise in the conduct of the business.

Certain items are treated as income for a reason similar to that involved in depreciation charges, which are made for the purpose of bringing about an equitable distribution of expense over the successive periods covered by statements of profit and loss. For instance, it may take a year to earn a certain income, the receipt of it at the end of that time being contractually assured. If two statements of profit and loss are made during the year and all of the income is credited to the second period, the profits of the two periods cannot be fairly compared. If the income is an annual interest payment on notes receivable, and is due on December 31, a closing on June 30 should have credit for half of the amount, for clearly half of the interest has been earned, even though it is not due until the end of the second half of the year. Items thus earned but not due are scheduled as accrued income, and must be taken account of in closing, so that the profits of one period may be comparable with those of earlier or later periods.

**2. Treatment of Accrued Income.** — Accrued income is entered as an asset in the balance sheet by means of an accrued income account, which is opened only in connection with the closing of the books. If the accrued interest receivable on De-



cember 31 is \$1,000 00, then the interest earned on June 30 is \$500 00, and on closing is entered as follows

Accrued Income Not Due — Interest	500 00	
Interest		500 00
Placing of accrued interest on the books		

When the whole amount of the interest is paid on December 31, the following journal entry is made

Cash	1,000 00	
Interest		1,000 00
Receipt of interest on notes receivable		

This entry alone would result in an excessive credit to interest for the second period. To obviate this difficulty, the previous closing entry is reversed after the closing of the books on June 30 by the following opening entry

Interest	500 00	
Accrued Income Not Due — Interest		500 00
Reversal of accrued interest entry to reopen the interest account		

With this reversing entry and the final credit of \$1,000 00, there results a credit balance of \$500 00 for the second half of the year, which is the same amount credited to the interest account for the preceding period. In other words, these entries make a fair apportionment of the interest earnings between the first and the second period of the year.

As rents, royalties, and other incomes due at stated periods are treated in the same way, the journal memoranda showing the nature of the accrued items are entered both in the ledger and in the balance sheet. For example, if in addition to the accrued interest there should be accrued rents of \$300 00 and accrued royalties of \$150 00, the several items are entered on the asset side of the balance sheet as follows

Accrued Income Not Due		
Interest	500 00	
Rents	300 00	
Royalties	150 00	950 00

**3. Accrued Expense and Accrued Accounts Payable.** — The problem of accrued expense is similar to that of accrued income. Payment for a loan or facility may be made at the close of the year. As a result, the profits of the first half of the year cannot be properly compared with the profits of the second half unless the expense incurred for the whole year's operation is correctly apportioned between the two periods. If interest to the amount of \$400 00 is paid December 31 on a note payable, half of the interest has accrued on June 30, and is entered on the books at the mid-year closing by means of the following journal entry

Interest	200 00	
Accrued Accounts Payable - Interest		200 00
Placing of accrued interest payable on the books		

As the accrued accounts payable account is opened only for the purpose of facilitating the closing of the books, the following reversing entry must be made to reopen the books for the succeeding period

Accrued Accounts Payable - Interest	200 00	
Interest		200 00
Reversal of accrued interest entry to reopen interest account		

After this entry has been posted, the accrued accounts payable account is closed and the interest account reopened with a credit balance of \$200 00 for the second half year.

When the payment of the interest is finally made on December 31, the outlay is journalized as follows

Interest	400 00	
Cash		400 00
Payment of interest on notes payable		

The posting of this interest charge results in an interest debit balance of \$200 00, which is an amount equal to that charged to the preceding period. By means of these entries, therefore, the annual interest payment has been equitably distributed between the two half years

Accrued accounts payable represent, of course, a liability. As this liability may consist of accrued interest, accrued taxes, accrued wages, accrued rent, or any other accrued expense which is payable at stated times and apportionable over a number of periods, the journal memoranda showing the nature of the items should be entered in the ledger memorandum space, so that a proper analysis of the accrued accounts payable account may be made in the balance sheet.

**4. Deferred Expense.** — The matter of deferred expense was referred to in Chapter IX in the discussion of the treatment of extraordinary repairs. There are many expenses which are paid in one period but properly chargeable over a much longer time. For instance, an insurance premium may be paid in advance for three or five years. It is clear that such an expense should be apportioned in equal amounts to the three or five years for which the policy is secured. If the premium payment is \$60.00 for three years, the expenditure is journalized as follows:

Insurance	60 00	
Cash		60 00
Premium for three years on fire insurance policy		

As only \$20.00 of the outlay is chargeable to expense at the close of the first year, the remainder must be deferred to the succeeding period by means of the following journal entry:

Deferred Expense — Insurance	10 00	
Insurance		40 00
Deferment of part of the insurance expense		

After the balance of the insurance charge has been closed into profit and loss, another journal entry must be made for the purpose of reopening the insurance account and closing the deferred expense account, which is opened merely to facilitate the closing of the account. The proper reversing entry is, of course, the following:

Insurance	40 00	
Deferred Expense — Insurance		40 00
Reversal of the deferred expense entry to reopen the insurance account		

At the end of the second year, another \$20 00 is charged as expense to profit and loss, the remaining \$20 00 being deferred to the last year by means of a deferring and reversing entry similar to those employed at the close of the previous year. At the end of the third year the balance of the original expenditure is closed into profit and loss.

A more abbreviated way of treating the entries is to set up both an expense and asset account. The expense account may be called *insurance* and the asset item *unexpired insurance*, or *insurance paid in advance*. The entry of the original \$60 00 for the three-year policy would be as follows:

Unexpired Insurance	60 00	
Cash		60 00
Purchase of three-year insurance policy		

At the end of the year when it would be necessary to charge \$20 00 of the amount to the expenses for the year the following entry could be made:

Insurance	20 00	
Unexpired Insurance		20 00
Charging \$20 00 to insurance expense		

The advantage of this treatment is that it requires no reversing entry. All of the other items of deferred expense may be treated in the same way. If several of these items are treated without the use of the *deferred expense* account, it is still advantageous to group the several items on the asset side of the balance sheet under the heading of *deferred expense* as follows:

Deferred Expense		
Unexpired Insurance	40 00	
Rent Paid in Advance	75 00	
Advertising	<u>125 00</u>	240 00

Interest, rent, and other expense items that are paid in advance to cover a period longer than that covered by the first closing after the expense has been incurred are treated in a similar manner. If the expenditure for advertising for a given year is unusually large, that too should be deferred in part for

the purpose of making the amount of this expense approximately the same from year to year, unless the larger expenditure clearly affects only the income of the year in which it is made. Large advertising expense frequently affects the income of the business for many years, and tends to create a permanent goodwill that may be sustained by annual expenditures much lower than those made in the earlier periods of the business.

It is commonly regarded as conservative accounting practice to include organization expense as a deferred expense to be apportioned over a period of years, perhaps five or more. There is, however, no sound theoretical basis for such a treatment. The expenses of organization provide an asset which is owned as long as the business exists as a going concern and upon which the business may earn in competition with other concerns, which must incur a similar investment before entering the field. In other words, only those assets should be depreciated which last but a term of years. Conversely, no asset should be depreciated unless it wears out, becomes obsolete, or for some other reason ceases to serve the purpose for which it was originally purchased.

**5. Deferred Income.** — An expense paid in advance by one firm may be an income received in advance by another. An insurance company receiving premiums three years in advance does not apportion all of this income to the year in which it is received, nor would a newspaper receiving subscriptions for a year in advance credit all of this income to the first half of the year if the books are closed twice during the annual period. If the annual advance subscriptions received by the newspaper on January 1 total \$10,000 00 the receipt is journalized as follows.

Cash	10 000 00	
Subscriptions		10,000 00
Subscriptions received in advance		

In closing the books on June 30, credit is taken by means of the following entry for only half of the total amount

Subscriptions	5,000 00	
Deferred Income — Subscriptions		5,000 00
Deferment of part of subscription receipts		

The remaining \$5,000 00 of the subscription account is, of course, credited to profit and loss in the usual way

As the deferred income account is opened only for the purpose of apportioning income properly at the time of closing, the deferring entry must be reversed to reopen the subscription account for the subsequent period. This is effected by means of the following journal entry:

Deferred Income — Subscriptions	5,000 00	
Subscriptions		5,000 00
Reversal of deferred income entry for purpose of reopening subscription account		

At the close of the second period, the deferred income of \$5,000 00 is, of course, closed into profit and loss

The deferred income account obviously appears on the liability side of the balance sheet, its treatment in this respect being precisely the opposite of the deferred expense account. Deferred expense may be thought of as a receivable from a subsequent period. If this is done, deferred income clearly becomes a payable to a subsequent time.

It is possible to treat deferred income without the use of a deferred income account and without the reversing entry at the time of reopening the books. The income deferred can be treated as a reserve account and the amount charged against it in closing the books is the amount credited to income for the period. In the subscription illustration there would be an *unearned subscription* account and a *subscriptions earned* account. The subscriptions received in advance would be credited to the *unearned subscription* account. The following journal entry would be made in recording the \$10,000 00 of subscription referred to above:

Cash	10,000 00	
Unearned subscriptions		10,000 00
Subscriptions received in advance		

At the end of the six months period half of the total could be either credited directly to profit and loss as subscriptions earned or the credit could be made to a *subscriptions earned* ac-

count which would be closed into profit and loss. If the closing entry were the only credit to the subscriptions earned account the closing entry would be made to profit and loss as follows.

Unearned subscriptions	5,000 00	
Profit and Loss — Subscriptions earned		5,000 00
Crediting profit and loss with the period's share of the subscriptions earned		

The balance of the unearned subscription account would then be carried to the liability side of the balance sheet as deferred income or income reserved for credit to later periods

It might be true, however, that some of the subscriptions would be received at the expiration of the year for which the papers were received so that credits would be made from time to time during the period to the *subscriptions earned* account. Under such circumstances the part of *unearned subscriptions* credited to profit and loss would go first to the subscriptions earned account, which would then be closed into profit and loss by the following entries

Unearned Subscriptions	5,000 00	
Subscriptions Earned		5,000 00
Crediting the period with its share of subscriptions earned		

Assuming the *subscriptions earned* account had already to its credit \$7,500 00, then it would be closed to profit and loss by the following journal entry

Subscriptions earned	7,500 00	
Profit and Loss — Subscriptions Earned		7,500 00
Closing subscriptions earned into profit and loss		

The fact that the form of entry involving the *deferred income* account is frequently used makes it necessary to understand the procedure. It is, however, more involved and less satisfactory than the usage involved in the two accounts of *unearned subscriptions* and *earned subscriptions*

**6. Reserve for Bad Debts.** — It has been found by experience that a certain percentage of accounts receivable prove to be bad or uncollectible, and failure to take account of such losses results in an overstatement of the net profits from year to year. If the losses from this source were the same each year, they could be charged to expense as they arise and there would be no need of providing for an even distribution of them over the good and the bad years. Inasmuch, however, as the large losses of bad years may be due entirely to circumstances beyond the control of the management, such exceptional losses must clearly be treated as a deferred expense or must be provided for in advance. The latter method is the one commonly employed, a valuation reserve being set up against accounts receivable or notes receivable, or against both of these accounts. At the end of each period, a certain per cent of the credit sales, as determined by experience, is charged to the account of losses from bad debts and at the same time credited to the bad debt reserve. If the bad debts are estimated at two per cent of the credit sales and the latter amount to \$100,000 00, the journal entry providing for losses under this head is as follows

Losses from Bad Debts	2,000 00	
Reserve for Bad Debts		2,000 00
Setting up of a reserve for bad debts		

The debit element of this entry is, of course, closed into profit and loss in the usual way.

After the creation of the bad debt reserve, losses arising from the default or insolvency of debtors are charged directly to this account. For instance, if the loss in the account of John Smith is \$250 00, the amount is marked off by the following journal entry:

Reserve for Bad Debts	250 00	
John Smith		250 00
Charging off the account of John Smith on account of insolvency		

If the average annual losses fall far below the amount set aside each year to the bad debt reserve, the latter becomes in



effect an addition to capital. Whenever such a condition arises, the excess in the reserve should be credited to the capital account, and the annual charge to losses from bad debts should be decreased so as to bring the bad debt reserve within an amount safely necessary to cover probable losses.

As the reserve for bad debts is a valuation account, similar to the reserves for depreciation, it is entered in the balance sheet as a deduction from the assets against which it is accumulated. Assuming that the accounts receivable were \$100,000 00 and that the reserve for bad debts at the date of closing was \$7,500 00, the items on the asset side of the balance sheet would appear as follows:

Accounts Receivable	\$100,000 00	
Less Reserve for Bad Debts	<u>7,500 00</u>	\$92,500 00

### QUESTIONS AND PROBLEMS

1. What is an income?
2. What is meant by expense?
3. The *Valley News* received subscriptions a year in advance as follows:

January 1	\$5,000 00
February 1	6,000 00
March 1	4,000 00
April 1	4,500 00
May 1	3,000 00
June 1	2,000 00

On June 30 the bookkeeper closes his books. What entries would he make to properly close the subscription account into profit and loss?

What journal entry affecting subscriptions should be made in reopening the books on July 1?

4. On January 1 the Valley Book Store discounted its \$6,000 00 note at the bank at 8% for six months, getting credit at the bank for the face of the note less the discount. On March 1 the books are closed. Make the entry required to properly apportion the interest expense involved in the discount of the note. What entry should be made in reopening the interest account April 1 so far as this item is concerned?

5. The Valley National Bank closed its books June 30. Of the total interest received \$3,000 00 was deferred. It found also that \$2,500 00 of interest had accrued on bonds owned. It also had \$500 00 in wages and \$200 00 in rent which were accrued and unpaid.

Make appropriate closing entries for these items. Make also the entries to reopen the accounts July 1.

6 The Rational Biscuit Co closed its books June 30. The Valley Grocery Co, one of its customers, having an account of \$750.00, went into bankruptcy and was fully liquidated in June. General creditors received fifty cents on the dollar. The Rational Biscuit Co received its check on June 20.

In closing on June 30 the Company made its usual credit of \$1,000.00 to Reserve for Bad Debts. It had spent during the six months \$20,000.00 in advertising and decided to defer one half of this.

Enter all the above items into the journal. Make the opening entry July 1 for the advertising account.

## CHAPTER XII

### INTERPRETATION AND MANAGERIAL USE OF THE REVENUE STATEMENT

**1. Basis of the Grouping of Accounts in the Revenue Statement.** — The general purpose of the revenue statement was explained in Chapter II, the outline there given being for a small merchandise business. The number of accounts entering into the revenue statement is determined partly by the number of commodities and services involved in the business and partly by the amount of the expenditures for each. If the total outlay for a given commodity is large, the expenditures for the commodity are brought together in a separate account, so that the management may plan economies in its purchase and guard against waste in its use. For instance, if a large amount of fuel is purchased annually, a fuel account is ordinarily entered on the books. The various commodity accounts, in turn, are classified under the cost of the services of which the accounts form a part. This grouping of accounts according to the service into which they enter may be called a functional classification. The various functional classifications are further grouped according to the administrative head or the administrative unit responsible for the different functions or services entering into the life of the business.

This underlying basis of the creation and grouping of accounts is of great importance, and becomes increasingly so with a growth in the size and complexity of the business. The sundry and miscellaneous accounts should be used only to include small items that are not otherwise provided for in the accounting classification. As these particular accounts are of very little managerial use, care should be taken to see that their totals do not become large. When they do, the accounts should be further analyzed as to the commodities or services secured for the outlays. In other words, the accounts showing

the commodities and services purchased should include all but a small fraction of the total expenditures

No classification of accounts should be made for any business until an analysis has been made of the organization of the business under consideration. The grouping of accounts according to the administrative units has the advantage of furnishing information, not only to the head of each division as to the operating results of a particular unit, but to the general manager as to the operating results of the business as a whole. There is a growing tendency in commercial enterprises to departmentalize business activity, and to hold some one individual responsible for the results achieved in a department. As a result, the accounts created and their grouping in the revenue statement should be such that the administrative officers of the different units and the general manager of the business will have a proper basis for considering the problems of the various units or the efficiency of their personnel.

**2. Frequency of Closing the Accounts.** — The growing tendency to make larger administrative use of accounting data is bringing about more frequent closings of the books. Without such closings, it is of course impossible to ascertain the results of operation or the condition of the business from time to time. Monthly closings are becoming quite frequent, while much statistical data are taken from the books daily and weekly for the purpose of keeping check on the efficiency of operation. Some concerns go so far as to show a daily tabulation with estimated profits.

**3 Fixed Costs** — An examination of published revenue statements and the writings of well-known accounting authors will show that considerable attention has been given to gathering together a group of items designated as fixed charges. Little has been done, however, toward pointing out their use and business significance. These have either been presumed to be commonly understood, or have been left by common consent to each business executive for his own determination.

Perhaps the first impression to be formed regarding fixed charges is that no great amount of attention need be paid to

them in the management of the business, because so little can be done toward changing the amount when once contractually determined. They have, however, played a larger rôle in business policy than such casual consideration might seem to indicate. Fixed costs must be met regardless of the volume of sales. A certain outlay or investment is made to provide the organization and facilities to carry on a certain volume of business, but a failure to realize this anticipated volume does not produce a corresponding reduction in the fixed charges, those having been determined in connection with the original set-up. A business thus operating below its capacity suffers of course a disadvantage in competition with concerns more favorably situated, and, under freely competitive conditions, provided the fixed investment is large, must sell its goods at a price insufficient to produce the usual return on the investment and also to pay the fixed charges. Under such conditions, the price is frequently lowered to cover no more than the costs other than the fixed charges until a larger volume of business is secured. An alternative and sometimes better course is to maintain prices and incur exceptional expenses in the way of advertising until the business is brought to its proper volume, even though meantime the net profits may not be such as to cover the fixed charges and at the same time yield a return on the investment that would be satisfactory in the long run. If the business secured by this extraordinary expense affords a return in excess of the additional expense involved, it reduces to that extent the loss from the fixed charges.

While considerations of business policy seem to call for a distinct classification of fixed charges, the administrative or functional classification is the predominant basis for account grouping in the revenue statement, a schedule of the fixed charges being usually submitted as a separate exhibit. Thus, in Illustration No. 16, below, there is a group of accounts under the caption, *Maintenance, Operation, and Upkeep of Building*. These expenses, though ordinarily falling under the supervision of one of the executives of the business, are in the nature of fixed charges. In order to make a complete summary of these

charges, account must be taken also of items in other groups which vary little with the volume of business after provision has once been made for organization and the installation of equipment. Telephone charges, delivery expenses, and interest do not vary much from month to month and cannot be ignored in considering fixed costs. In other words, a separate schedule of items from various captions must be made if it is desired to make an accurate estimate of fixed charges.

**4. Selling Expenses** — The selling organization of a business is ordinarily under the supervision of a separate executive if the business is large enough to justify such specialization. With the appointment of a separate sales manager, it is logical, of course, to group under the general caption of *Selling Expenses* the accounts showing the cost of the several services and functions for which he is directly responsible. Such grouping provides the basis of valuable information to the executive of the sales department and to the general manager of the business as well.

In a smaller establishment, in the absence of a special sales executive, the grouping of the sales functions under a separate head becomes less important, though the grouping may be employed if there are a sufficient number of employees to set up a division of labor under this head. Where the manager is at once salesman, office manager, and caretaker of the establishment, an attempt to maintain a departmental grouping of accounts and to apportion his salary among the various general captions is hardly worth while, since the results derived are of practically no significance from the managerial point of view. Consequently, the general heads of the more elaborate organization disappear and become combined under the caption of *Store Management*. But, while there is no further need of the general caption of *Selling Expenses*, subsidiary captions showing the cost of items easily segregated, such as advertising, rent, water and light, are still maintained.

**5. Delivery Expenses** — This group of accounts appears in the statement of any establishment which renders this particular service. If the total of the expenditures is small, the group

may become a single account. Under any circumstance, there is ordinarily a division of labor such that some particular individual is charged with rendering this service, and therefore to some extent responsible for its cost

**6 Classification of Income.** — In a mercantile establishment, as a large percentage of the income arises from sales, it is desirable to know the amount of the gross profits received from the various commodities and the net income derived from each. Information of this kind is useful in the determination of advertising policy, in the choice of brands to be carried, and in the adjustment of purchases to the trade demand. Consequently, in the revenue statement of the departmentalized business, the total of sales for each department is shown. If the business is conducted as a single unit, the statement would show the amount of sales for only the chief articles of merchandise. Frequently, in order to have a full line with which to attract trade, it is necessary to carry certain commodities for which the per annum volume of sales is small. These items are generally grouped together and the amount of the sales given in a single item. But, even in such cases, the accounting and statistical data showing the amount of purchases and sales for each item should be available in such form that an analysis can be made of the rapidity of the turnover of each of the various classes of commodities carried.

The basis for the classification of incomes is obviously similar to that for the classification of expense. The commodities sold represent the services rendered by the business, and the income depends upon the volume of sales of the various commodities sold at a profit. In short, the classification is primarily a commodity classification, allied commodities being grouped into separate departments each under the supervision of a responsible head. By means of such a classification, it is possible to arrive at not only the gross profits made by each department but also the net profits from operation for each of the several units of which the business may be composed. These separate departmental revenue statements have a distinct value, and may be in the form illustrated on the following page

ILLUSTRATION NO 14  
CONDENSED STATEMENT OF DEPARTMENTAL PROFITS

	TOTAL OF ALL DEPARTMENTS	PER CENT OF NET SALES	DEPART- MENT A	PER CENT OF NET SALES	DEPART- MENT B	PER CENT OF NET SALES
Net Sales						
Cost of Sales						
Gross Profits						
Operating Expenses						
Operating Profits						
Other Income						
Total Income						
Deductions						
Net Profits						



Where condensed, as in the foregoing illustration, the departmental revenue statements should be accompanied by special exhibits setting forth the essential details for each department, including a classification of expenses after the manner of Illustration No. 16. The more important items of expense, or for that matter each item of expense, may be shown as a certain percentage of the sales.

An analytical statement of the gross profits is advantageous even if the business is not organized on the departmental basis. With a knowledge of the joint expenses required to sell certain commodities, it is possible from the gross profit statement to ascertain whether the mark-up is sufficiently high for the various commodities to allow for the expenses estimated to be chargeable to them.

**7 Purchases and Inventory.** Since an inventory is necessary for closing the books of a mercantile business, there has arisen a tendency to keep a record of purchases at cost, together with, in a parallel column, a record of the sale price of the goods bought. Under such an arrangement, the purchase register shows not only the total of merchandise purchases, but also the selling price which is placed on the goods. If a record is further kept of the mark-down as well as of the mark-up, it is possible to approximate the merchandise inventory by the use of an average percentage of the mark-up, the individual percentages being of course certain ratios of the selling price. A weekly departmental stock summary may be kept in a stock ledger in something like the form illustrated on the following page.

The data thus summarized in the stock ledger must necessarily be entered in detail in the purchase register, otherwise the weekly totals for the merchandise stock register cannot be obtained. The requirement is easily provided for by an increase in the number of columns in the purchase register to include a column for purchases, sales, mark-up percentage, and reductions. This information must, of course, be given for each commodity or group of commodities for which accounts are kept. The inventory at the end of a period may then be cal-

ILLUSTRATION NO 15

MERCHANDISE STOCK LEDGER

Dept 5

	PURCHASES COST	PURCHASES MARK	SALES	MARKS	DISCOUNT	TOTAL	BALANCES	
							Selling	Estimated Cost
Inventory Jan 1, 1910	4200 00	7000 00						
Purchases Week End- ing Jan 8, 1910	560 00	800 00	450	15	15	400		
Totals	4760 00	7800 00	450	25	15	400	7310 00	4460 00
Purchases Week End- ing Jan 15, 1910	450 00	750 00	400	50	1 50	431 50		
Totals	5210 00	8550 00	850	55	10 50	921 50	7028 50	4653 39

culated by means of the following formula, which is derived in the manner indicated.

$S$  = Sales during the period

$R$  = Average percentage of the mark-up

$D$  = Deductions from sales through price reductions

$C$  = Deductions from sales through discounts

$L$  = Sales value of inventory at the beginning of the period plus purchases at sales price

$N$  = Inventory at the end of the period at cost

Then  $N = (L - S - D - C) (100 - R) \%$

If the total reductions from the sales inventory at the beginning of the period plus purchases at sales price are represented by  $T$ ,

Then  $T = S + D + C$

And  $N = (L - T) (100 - R)$

The calculations involved in the application of this formula are made in the illustration given above

There should be a test of the calculated inventory not less than once a year. If the calculated inventory is used as indicated above, the inventory count should show both the purchase and the sales price of the goods on hand. In some cases, the inventory is taken at the sales price, and the mark-up percentage used to calculate an inventory at cost, but this method does not provide a satisfactory cost-price inventory to be used in the calculation of the annual profits.

**8. Revenue Item Comparisons and Percentages.** — It does not mean much to a busy executive to tell him that the selling expenses of the past year were \$1,500 00. If, however, you say that the selling expenses were \$1,500 00, or an increase of \$500 00 over the selling expenses of last year, while the profits from sales were \$500 00 less this year than the year before, he gets an idea of the course of affairs. He at once raises the question whether the increase in selling expenses does not represent a bad investment, resulting in a reduction of profits. To answer this question correctly, the selling expenses must be expressed as a percentage of the total sales. If it is found that,

although the selling expenses for the past year were \$500.00 larger than they were the year before, they were at the same time only 5 per cent of the total sales, whereas in the preceding year they constituted 7 per cent of the total sales, the executive must look elsewhere than to the selling expenses for the source of the reduction in the profits. In other words, a comparison of one year with another, or of one month with another, cannot be advantageously made unless the expenses are stated both absolutely and relatively, or in percentages of income. Expenses are justified only because they produce income. If increased expenses add to income a smaller amount than the expense increase, the surface indications are that the additional expense is not justified from the business point of view. If along with an increase in expenses there develops a reduction in the ratio of expenses to income, the increased expenses seem amply justified.

The condensed departmental comparative statement shown above in Illustration No. 14 will serve as a condensed comparative statement for two years of operation if there is substituted for the column *Department A* a column covering the business operations for the past year, and for the column *Department B* a column covering the operations of the year preceding that for which the statement is primarily made. If the statement is to be made for the year ending December 31, 1919, the caption of the column headed *Department A* becomes *Year Ending December 31, 1919*, while the caption of the column headed *Department B* is changed to read *Year Ending December 31, 1918*.

The form of statement given below in Illustration No. 16 is designed to show in detail an analysis of the data as found in the annual closing of the accounts, and is used where the business has some plan for cumulative comparisons, such as charts, and wishes a full statement from which needed data may be selected. The statement shown in Illustration No. 17 is the one which would prove of most service to an executive. While there are no percentages except the percentages of increase of each item as compared with the same item for the previous year, these percentages are very useful as a basis for compari-

sons If, for example, there is a 20 per cent increase in income from sales and a 15 per cent increase in operating expenses, the manager is able to draw his conclusions much more quickly from this statement than from Illustration No 14 above, in which the percentages are given in parallel columns and must be subtracted

In the form of comparative statement shown below, decreases are entered in red in the increase column

**9. Budgets and Statements.** — The statement that salaries and wages in the month of January were \$15,000 00 does not mean a great deal to a manager unless his business program has been carefully analyzed in advance and it has been determined that a reasonable allowance for salaries and wages is, say, \$12,000 00 The statement showing a larger outlay than was anticipated leads to analysis for the purpose of finding the causes of the unexpectedly large total of expense The fact that expenditures are larger than they were for the corresponding month last year would lead to some inquiry, but it should be possible on January 1 to use the previous experience and to forecast the current situation, so that a close estimate could be made of the expenditures to be anticipated This estimate serves as a standard accomplishment which the officers and employees should strive to attain It is becoming more customary in business to estimate for each succeeding month what the expense and incomes are to be for the month These estimated incomes and expenses may be combined into an estimated revenue statement with which the actual revenue statement may be compared when the statement for the month is made Illustration No 17 shows such a comparative revenue statement

The estimated expenditures of a business are sometimes referred to as a *budget* The word *budget* has been more generally used to refer to classified estimates of expenditures for a period made by a municipality as a guide to the discovery of appropriations required A business is in a position similar to that of the municipality or governmental body Its budget of expenses must be related to its present resources and its expected incomes. The budgetary expenses are thus related to

the incomes in the estimated or anticipated revenue statement for the month shown in Illustration No 17

In large business concerns the expense estimate may be set up on the journal and ledger as they are in the municipal accounts. On the other hand, these estimates may be set up as comparative statistical data, as they are set forth in Illustration No 21.

## ILLUSTRATION NO 16

*Pro Forma Revenue Statement*

## REVENUE STATEMENT FOR PERIOD BEGINNING—ENDING—

(All Expense Per Cents are per cents of Net Sales, Net Profit per cent is per cent of Total Capital)

Gross Sales		
Less Returns and Allowances		-
Net Sales		-
Cost of Goods Sold		
Purchases		
Mdse Inv 1st of Period		
Freight-In		-
Total		-
Less Purchase Returns and Allowances		
Mdse Inv End of Period		-
Total deductions		-
Net Cost of Goods Sold		
Gross Profits	(%)	
Expenses		
Selling Expenses		
Salaries and Wages of Sales Force		
Commissions to Sales Force		
Traveling Expenses for Sales Force		
House Entertainment		
Advertising		
Total	(%)	-
Delivery Expense		
Operation of Auto Truck		
Operation of Wagon Truck		
Depreciation of Del Equipment		
Sundry Delivery Expense		
Total . . . . .	(%)	.

ILLUSTRATION NO 16—*Continued*REVENUE STATEMENT FOR PERIOD BEGINNING—ENDED—*Continued*

Management and Office			
Stationery			
Salaries of Office Force			
Office Supplies			
Telephone and Telegraph			
Sundry Office Expenses			
Total	(	¢ s)	---
Maintenance, Operation and Upkeep Bldg			
Rent			
Heat, Light and Power			
Taxes			
Insurance			
Repairs of Bldg and Equipment			
Depreciation of Building			
Depreciation of Equipment			
Sundry Expenses of Bldg			
Total	(	¢ s)	---
Losses from Bad Debts	(	¢ s)	
Miscellaneous Expense	(	¢ s)	
Total Expense		(	¢ s) ---
Profits from Operation		(	¢ s) ---
Other Income			
Discount on Purchases			
Interest			
Total other income			---
Total Income	.	.	. . .
Deductions			
Interest	.	.	.
Discount on Sales	.	.	. . .
Total	.	.	. . .
Net Profits	.	.	. . . ( 7/8 s) ---

## ILLUSTRATION NO 17

## COMPARATIVE REVENUE STATEMENT

	Estimated for Dec , 1918	Month ended Dec 31, 1918	Month ended Dec 31, 1917	Increase	Increase per cent
1 Net Sales Furniture					
2 Cost of Fur Sales					
3 Gross Profit					
4 Net Sales Carpets					
5 Cost of Car Sales					
6 Gross Pro (Carpets)					
7 Total Gross Profits					
8 Selling Expenses					
a Salaries & Wages					
b Commissions					
c Travelling Exp					
d House Entertainment					
e Advertising					
Total Selling Exp					
9 Delivery Expense					
a Operation Auto Truck					
b Oper Wagon Truck					
c Sundry					
Total Del Exp					
10 Management and Office Exp					
a Stationery					
b Salaries					
c Office Supplies					
d Tel and Teleg					
e Sundry					
Total M & O Exp					



ILLUSTRATION NO 17—*Continued*COMPARATIVE REVENUE STATEMENT—*Continued*

	Estimated for Dec , 1918	Month ended Dec 31, 1918	Month ended Dec 31, 1917	Increase	Increase per cent
11 Maintenance, Operation and Upkeep of Bldg					
a Rent					
b Heat, Light and Power					
c Taxes					
d Insurance					
e Repairs					
f Depreciation					
g Sundry					
Total M O & U of Bldg Exp					
12 Losses from Bad Debts					
13 Misc Expenses					
14 Total 9, 10, 11, 12, 13					
15 Profit from Operation (7 minus 14)					
16 Other Income					
17 Total Income					
18 Deductions					
19 Net Profit					

## QUESTIONS AND PROBLEMS

- 1 What is the managerial use of an account payable? An account receivable? A delivery expense account? A fuel account?
- 2 What is the purpose of the accounts other than financial accounts (accounts receivable, accounts payable, etc.)?
- 3 What is the test as to whether any particular accounts should be kept?
- 4 When would a commodity be the subject of an account?
- 5 On what basis are accounts grouped in a revenue statement?
- 6 What has the organization of a business to do with the grouping of accounts?
- 7 Of what managerial advantage has the group of fixed costs?
- 8 What makes it difficult to segregate the group of fixed cost accounts?
- 9 On what basis are incomes grouped in the revenue statement? Why?
- 10 On January 1, 1919, the merchandise inventory was \$5,000 00 The purchases for the month of January were \$4,000 00 The sales were \$5,500 00 The average mark-up was 40% of the sale price The total price reductions for the month were \$125 00 What was the inventory at the end of the month?

11 What are the advantages of percentages in the totals of accounts or groups of accounts?

12 Discuss the uses of the comparative revenue statement

*Trial Balance of King Mdse Co for Year Ended Dec 31, 1919*

Cash	2,500 00	
Accounts Receivable	4,500 00	
Mdse Inventory	21,000 00	
Delivery Equipment	7,500 00	
Furniture and Fixtures	2,000 00	
Land	10,000 00	
Buildings	25,000 00	
Notes Payable		8,000 00
Accounts Payable		5,000 00
Mortgage Payable		25,000 00
John King, Capital		21,025 00
Mdse Sales		75,000 00
Return Sales and Allowances	150 00	
Discount on Purchases		400 00
Interest Received		750 00
Mdse Purchases	40,000 00	
Return Purchases		200 00
Administrative Salaries	12,000 00	
Administrative Expense-general	3,000 00	
Advertising	1,500 00	
Salaries of Salesmen	3,550 00	
Misc Selling Expense	850 00	
Operation of Delivery Service	1,750 00	
Repairs on Delivery Equipment	250 00	
Interest Paid	350 00	
Discount on Sales	375 00	
	136,275 00	136,275 00

Adjustments, Dec 31, 1919

Mdse Inventory	25,000 00
Salaries of Salesmen accrued	200 00
Interest accrued on Notes Payable	75 00
Depreciation—4% on bldgs, 7% on Del Equip, 5% on Fur and Fixts	
Reserve for Bad Debts	125 00
Deferred Expense—Advertising	250 00
Deferred Expense—Repairs on Delivery Equipment	75 00

(a) Journalize the adjusting entries and close through the journal, opening all accounts on the ledger which are involved in the adjusting and closing entries

(b) Make out a Revenue Statement and Balance Sheet in due form

## CHAPTER XIII

### THE FORM AND MANAGERIAL USE OF THE BALANCE SHEET

**1. Use of the Balance Sheet.** — The balance sheet is highly essential to the manager in arriving at the standing of the business at the close of the fiscal period and in determining changes in the financial policy of the concern rendered necessary by a comparison of the condition of the business at the particular time with its condition at the close of previous years. While the revenue statement provides a summary of operations for the years and of their result in net profits, the balance sheet is needed to show the final effect of these operations on the form and amount of the assets and liabilities. Such information the manager should have, and the creditors of the concern will usually require, before arranging for material additions to the inventory or to the working capital. The form of the balance sheet and the order of the items which it contains become, therefore, matters deserving of consideration.

**2 Kinds of Assets.** — The classes of assets usually found in balance sheets are as follows: (a) Current assets, (b) working assets, (c) investments in reserves, (d) permanent investments, (e) fixed assets. Current assets and working assets are temporary in character. The first class (current assets) consists of cash and of other items which are turned into cash from month to month as the business proceeds, the second (working assets) of supplies on hand, expenses paid in advance, advances to agents, etc. While it is true that some of the working assets may be converted into cash, they are not ordinarily thus changed in the regular course of business. Permanent investments consist usually of interest in outside ventures maintained for reasons of business strategy, and may be composed of the securities of corporations over which it is desired to exercise control or of long-time loans to allied concerns for the purpose

of gaining a degree of control over their operations. **Fixed assets** are the investments of the business in plant and other permanent property essential to its operation, and include such items as land, buildings, furniture and fixtures, machinery and equipment, goodwill, patents, and franchises.

In considering the stability of a business, attention must be paid to the readiness with which the various assets can be turned into cash. To be able to pay obligations from funds accumulated from the regular turnover of current assets is not only desirable from the point of view of the business itself, but is particularly desirable from the standpoint of the creditors of the concern. The latter do not ordinarily wish to collect their bills through foreclosure or bankruptcy proceedings. The interests of both the business and its creditors require, therefore, that all accounts and notes currently falling due shall be met from current assets through the regular turnover accumulation of cash receipts.

The working assets may be partly converted into cash, and are valuable to this extent in case liquidation becomes necessary. They are not currently turned into cash, however, with the regular turnover of the merchandise inventory.

The permanent investments may or may not be readily salable, but a business can ill afford to sell them to liquidate liabilities which are currently falling due. On the other hand, they may be very desirable property in connection with a liquidation of all the assets, frequently bringing an amount greatly in excess of the value at which they were carried on the books.

The fixed assets of a business suffer most in case of liquidation. They are primarily valuable as part of a going concern, and cannot be sold to advantage when separated therefrom. They frequently form the basis for a long-time first mortgage, the holder being ordinarily given the ranking claim against the proceeds arising from a liquidation of the mortgaged assets.

**3. Kinds of Liabilities and Proprietorship.** — Liabilities are classified according to the time ordinarily elapsing before they must be met. The classes most commonly found in liability and proprietorship statements are as follows: (a) Current

liabilities, (b) deferred credits, (c) fixed liabilities; (d) capital, (e) appropriated surplus, (f) surplus. Current liabilities are obligations which mature from month to month as the regular turnover of the merchandise stock proceeds. They are in effect short-time loans to the business, and include such items as notes payable, accounts payable, and accrued accounts payable. The last-named item is sometimes given a special heading, such as accrued liabilities not due. Deferred credits are the claims of a succeeding period against the income received by the business during the period covered by the balance sheet. They are not liabilities, however, in the sense of claims that must be paid. They represent merely profits received in advance and therefore deferred to a later period. Fixed liabilities are those which are not being paid from month to month out of the current proceeds of sales, such as bonds, five-year notes, etc. Appropriated surplus is a group of accounts belonging to the corporation balance sheet, and represents surplus reserves which have been set aside for special purposes. The surplus invested in fixed assets is sometimes also classed as an appropriated surplus, because it is presumed not to be subject to distribution in the form of dividends. As any surplus, however, unless specially set aside, is subject to dividend declarations, regardless of the business asset in which it may be invested, the better practice is to limit the application of the term *appropriated surplus* to surplus funds which have been created and are being held for designated purposes. The final caption of the liability side is, of course, the capital group of accounts. In the partnership, this group consists of the capital accounts of all the partners, in the corporation, of the various classes of capital and of the regular as well as the appropriated surplus.

**4. Relation of Liabilities to Assets.** — The assets of a business arise only through the creation of liabilities and proprietorship. If two or more partners invest a certain amount of cash each in a business venture, the firm acquires a cash asset of the total amount and at the same time assumes an equal proprietary obligation to the owners for the money thus con-

tributed. If goods are later bought on credit, a liability of accounts payable arises to compensate for the asset of merchandise received. Loans from a bank provide an asset of cash through the creation of notes payable, while a mortgage of the equities of the owners may secure still other assets through the setting up of a long-term liability.

In acquiring assets through the creation of liabilities, a business usually relies upon the former through sale or operation to provide the funds with which the latter may be paid. When accounts payable are incurred, it is expected that the business will be able to pay these accounts from the proceeds of the sale of the goods purchased and still have in excess of the purchase price a gross profit sufficient to yield a net profit after expenses have been deducted. For the fixed or service assets, which ordinarily remain for years in approximately the form in which they are installed and which are commonly acquired through the creation of a long-term or fixed liability or through the issuance of capital stock, provision must be made for retiring any liabilities outstanding against them at the termination of their useful life, or a reserve must be built up from year to year to equal the value of the assets by the time they are used up and scrapped. As the total of fixed assets is ordinarily maintained through reserves which equal or exceed the depreciation of these assets, it is unimportant for the general commercial business to undertake to make the fixed liabilities expire with the disappearance of the original assets against which they were issued, because new assets regularly take the place of those which are discarded and the total of these assets is thus maintained. The term for which long-time liabilities are issued, therefore, becomes more a question of the demands of the investors to whom such securities may be sold. A business, however, whether public or private, which does not provide for the depreciation of assets through the creation of a reserve should make the term of the liabilities incurred no longer than the useful life of the assets concerned, otherwise, the business will be under the necessity of paying a return for the use of assets which it no longer owns in addition to a return for the use of

assets still in operation. Frequently, where the business is a prosperous one, instead of providing a fund for the retirement of the fixed liabilities as they fall due, the owners refund the original obligation through the issuance of a second liability.

Since deferred credits are essentially an apportionment of revenues to a future period, no provision is necessary for their payment.

The capital of the owners of a business represents an excess in assets over the amount required to meet the definite liabilities, and an increase in capital an increase in the safety of these outside claims. Increases in capital thus have a tendency to reassure the firm's creditors and to secure for the business a more extensive credit than would otherwise be the case. The holders of current liabilities obviously cannot feel safe if the total of their claims almost equals the value of the current assets which are relied upon for payment. Consequently, where increases of capital are available for increasing the current assets or reducing the current liabilities, the credit standing of the business is materially improved. The psychological effect of such increases is no less important than the strictly financial, for in the case of a thriving business the total current assets reach much further as a basis for credit than in the case of a business in which the net profits and the capital balances are on the decline.

An increase in the surplus of a corporation has, of course, the same significance with reference to its credit standing that an increase in capital has with respect to the credit standing of an individual business or a partnership. Funds derived from net profits may be used to increase the current assets, the working assets, or the fixed assets, and should be placed where they will best serve as an effective means of still further increasing the net profits, except in so far as they may be required for distribution to the owners of the business.

There is a special significance in the ratio of the net profits of the business to the investment of the owners. This ratio represents the percentage earned on the capital, and according as it is large or small marks the success or failure of the business.

so far as the interest of the owners is concerned. If the earnings are greater than in other possible lines, the owners will regard their interest as a profitable investment and extend the business as favorable opportunities present themselves. If, on the other hand, the earnings are comparatively low, the owners will tend to contract the business or place their returns in other enterprises.

**5. Comparative Balance Sheets.** — A comparison of balance sheets furnishes valuable information in addition to that offered by an analysis of the individual balance sheets under consideration. The effect of a certain line of business policy on the financial status of a concern cannot be fully foreseen nor can it be fully measured except by comparing the balance sheet items as they existed before the policy was inaugurated with the same items after sufficient time has elapsed for the policies in question to accomplish their results. If, for example, a business decides to discount its receivables and borrow money to be in a position to take advantage of its own purchase discounts, this policy will increase notes receivable discounted and decrease accounts payable, or, in other words, lessen the total investment in current assets and at the same time reduce the current liabilities. Whether the results of such a policy are a financial advantage is best determined by a comparison of the balance sheet after the adoption of the policy with the balance sheet before it was initiated.

Certain tendencies, moreover, of a favorable or unfavorable nature may develop in connection with a business, growing largely out of the personal characteristics of subordinate executives, changes in the personnel of the working force, or circumstances outside the business itself, and not in accord with the general business program. If these tendencies are to be quickly discovered, there must be frequent comparisons of the financial condition of the business with its condition at previous closings. Otherwise, encroachments on current assets through their investment in fixed assets may gradually result, without a full realization of what is actually taking place.

If a comprehensive view of the changes occurring in a given



period is desired, this can be had by first determining the total increase on the liability side and then analyzing the asset changes to ascertain the assets in which the additional funds have been invested. If no asset has been decreased in the interval, the increase in the liabilities must be offset by a corresponding increase in one or more of the various asset items. If some asset has been decreased, manifestly there results another source from which the increases in the other assets may have been derived. Conversely, in a similar manner, the total increase on the asset side may be compared with the increases in the several liability items for discovering the sources from which the increase in the assets has been secured.

Business concerns, like other institutions, are creatures of growth, and the measure and character of this growth during a given interval are best studied by a comparative analysis of the balance sheets at the beginning and at the end of the period. If the growth is to be considered as a cumulative matter, it is necessary to go even further than this, and to extend the comparison over a series of previous balance sheets. Such studies from time to time yield valuable information bearing on managerial policy which cannot otherwise be secured.

**6. Comparison of Balance Sheets with Estimates.** — In Chapter XII, it was pointed out that a well-managed concern usually has a general business program for the year and perhaps a special program for a shorter period of time. Such general and special programs involve the setting up, not only of an estimated revenue statement for the period covered, but also of an estimated balance sheet at its close. In order to determine the particulars in which there has been a failure to accomplish what was planned, this estimated balance sheet is compared with the actual balance sheet drawn up at the end of the period under consideration. It is probably not often that a business program is worked out in sufficient detail to include a complete estimated balance sheet, being more frequently limited to estimated sales, estimated purchases, estimated expenses, and estimated net profits. The effect, however, of the business operations proposed on the financial status of the concern at the end

of the period for which the program is formulated should be considered in order to control properly questions of business policy.

**7. Selection of the Form of Balance Sheet.** — As already explained, the current assets and current liabilities are particularly important in the determination of the financial problems of a mercantile business. They are of importance also in the case of a railroad or of a manufacturing concern. The greater part of railroad financing, however, is not accomplished through the creation of current liabilities, generally taking the form of long-term loans or of funded debts. The long-term loans are in most instances mortgages on the fixed assets. As these mortgages are brought on the market, the prospective purchasers of the securities, in order to arrive at the safety of the loan, invariably compare the total assets subject to the mortgages with the total long-term liabilities having a claim against the assets in question. The order of setting up the assets in the case of a railroad is, therefore, ordinarily opposite to that commonly recommended for a mercantile concern. The fixed assets are listed first, the other assets following in inverse order. Similarly, the liabilities are set up with capital stock first, funded debt second, and current liabilities third. In order that the difference between the assets and the liabilities may appear in the form of a balance, the surplus is frequently entered last on the liability side of the corporation balance sheet. As an illustration of a typical balance sheet of this kind, there is given below the balance sheet recommended by the Interstate Commerce Commission for the railroads of the country.

#### ILLUSTRATION NO. 18

FORM OF GENERAL BALANCE SHEET STATEMENT AS PRESCRIBED  
BY THE INTERSTATE COMMERCE COMMISSION FOR  
STEAM RAILROADS

##### *Assets*

Property Investment

Road and Equipment

Investment to June 30, 1907

Investment since June 30, 1907

Reserve for Accrued Depreciation—Cr.

**Securities**

Securities of Proprietary, Affiliated, and Controlled Companies —  
Pledged

Securities Issued or Assumed — Pledged

Securities of Proprietary, Affiliated, and Controlled Companies —  
Unpledged

**Other Investments**

Advances to Proprietary, Affiliated, and Controlled Companies  
for Construction, Equipment, and Betterments

**Miscellaneous Investments**

Physical Property

Securities Pledged

Securities Unpledged

**Working Assets**

Cash

Securities Issued or Assumed — Held in Treasury

Marketable Securities

Loans and Bills Receivable

Traffic and Car-Service Balances Due from Other Companies

Net Balance Due from Agents and Conductors

Miscellaneous Accounts Receivable

Materials and Supplies

Other Working Assets

**Accrued Income Not Due**

Unmatured Interest, Dividends, and Rents Receivable

**Deferred Debit Items**

Advances

Temporary Advances to Proprietary, Affiliated, and Controlled  
Companies

Working Funds

Other Advances

Rents and Insurance Paid in Advance

Taxes Paid in Advance

Unextinguished Discount on Securities

On Capital Stock

On Funded Debt

Property Abandoned, Chargeable to Operating Expense

**Special Deposits**

Cash and Securities in Sinking and Redemption Funds

Cash and Securities in Insurance and Other Reserve Funds

Cash and Securities in Provident Funds

Other Deferred Debit Items

**Profit and Loss**

Balance (if a debit)

*Liabilities*

## Stock

## Capital Stock·

## Common —

Held by Company

Not Held by Company

## Preferred —

Held by Company

Not Held by Company

## Debenture —

Held by Company

Not Held by Company

Receipts Outstanding for Installments Paid

Stock Liability for Conversion of Outstanding Securities of Constituent Companies

Premiums Realized on Capital Stock

## Mortgage, Bonded, and Secured Debt

## Mortgage Bonds—

Held by Company

Not Held by Company

## Collateral Trust Bonds—

Held by Company

Not Held by Company

## Plain Bonds, Debentures, and Notes—

Held by Company

Not Held by Company

## Income Bonds—

Held by Company

Not Held by Company

## Equipment Trust Obligations—

Held by Company

Not Held by Company

## Miscellaneous Funded Obligations—

Held by Company

Not Held by Company

Receipts Outstanding for Funded Debt

Receivers' Certificates

Obligations for Advances Received for Construction, Equipment, and Betterments

## Working Liabilities

Loans and Bills Payable

Traffic and Car-service Balances Due to Other Companies

Audited Vouchers and Wages Unpaid

Miscellaneous Accounts Payable

- Matured Interest, Dividends, and Rents Unpaid
  - Matured Mortgage, Bonded, and Secured Debt Unpaid
  - Working Advances Due to Other Companies
  - Other Working Liabilities
- Accrued Liabilities Not Due
  - Unmatured Interest, Dividends, and Rents Payable
  - Taxes Accrued
- Deferred Credit Items
  - Unextinguished Premiums on Outstanding Funded Debt
  - Operating Reserves
  - Liability on Account of Provident Funds
  - Other Deferred Credit Items
- Appropriated Surplus
  - Additions to Property through Income
  - Reserves from Income or Surplus
    - Invested in Sinking and Redemption Funds
    - Invested in Other Reserve Funds
    - Not Specifically Invested
- Profit and Loss
  - Balance (if a credit)

### **8. Relation of Form of Presentation to Problem to be Solved.**

— The comparative balance sheet has been especially recommended for managerial use. In determining the form of it, however, the special problem to be solved should always be considered. If the manager desires to compare the balance sheet with an estimated balance sheet, or with the balance sheet of a preceding period, the form shown in Illustration No 20 below should be used. On the other hand, a banker is ordinarily satisfied by a revenue statement and a balance sheet without detailed comparisons, the single statement indicating the strength or weakness of the business. For the banker's purpose, therefore, the forms shown in Illustration No 21 and Illustration No 16 are sufficient. An accountant ordinarily makes out a combined revenue statement and balance sheet for the period under consideration before throwing the information into the form of a comparative revenue statement and comparative balance sheet.

**9. Importance of Revenue Statement and Balance Sheet.** — The accounting information found in the regular books of rec-

ord is largely a sealed book for many business executives, the facts being couched in a language unintelligible to those who do not understand the form and interpretation of accounts. A trial balance conveys an interesting story to an accountant, but may be entirely without value to an executive. As a large part of the information upon which business policies are based is contained in the accounting records, it is of the greatest importance that this information should be so formulated as to convey to the manager the data which he needs in the solution of the problems that confront him. The accountant must consequently be informed in regard to these problems, so that he may be guided thereby in determining the form in which reports shall be made. Frequently, in addition to comparative data properly arranged, a full discussion of the figures by the accountant is extremely desirable, in order to give to the executive a more complete idea of the significance of the information conveyed in the report.

**10 The Cash Estimate and the Budget** — Expenses, purchases, and short-time liabilities are generally liquidated in cash. A liability is sometimes met by the issue of another liability. This serves to postpone the day when the outlay of cash is to be made in an amount equal to the liability. A company with ample assets may become insolvent because of its inability to sell these assets for cash in time to pay certain liabilities falling due. The assets are worth the amount of the liability provided it was not necessary to sell quickly. At a sacrifice sale they may not be sufficient to meet the liabilities. If the holder of liability claims becomes insistent, the business may become insolvent and the proprietors may lose their entire claims in the sacrifice sale. It is, therefore, important to estimate the cash requirements of a business and also the sources from which the cash may be received, in order to be in a position to make provision for financing the business operations. Such a financing program for a period of six months would involve listing the amounts of cash receipts expected from various sources by months and listing opposite the cash requirements. Such a schedule might be made in the following form:

ILLUSTRATION NO. 19  
ESTIMATED RECEIPTS AND DISBURSEMENTS

Estimated Receipts	Jan	Feb	March	April	May	June
Cash Balance 1st of month	\$	\$	\$	\$	\$	\$
Cash Sales						
Receipts on Account						
Cash Rec on Issue of Notes Pay						
Notes Receivable Paid						
Receipts from Interest, Rents, and Royalties						
Sundry Receipts						
Total Receipts	\$	\$	\$	\$	\$	\$
Expected Disbursements						
Cash Purchases	\$	\$	\$	\$	\$	\$
Payment on Notes Payable						
Payments on Account						
Special Fund Requirements						
Expense Outlays as per Budget						
Sundry Other Outlays						
Total Outlays						
Balance cash end of month	\$	\$	\$	\$	\$	\$

The preparation of a form of expected cash receipts and disbursements would require a careful analysis of both the balance sheet and revenue statement

## ILLUSTRATION NO 20

## VAILEY FURNITURE COMPANY

## COMPARATIVE BALANCE SHEET, DECEMBER 31

(The per cents other than increase per cents are of total assets or total liabilities)

	1918		1917	Increases	Inc %
Current Assets					
Cash					
Notes Receivable					
Accounts Receivable					
Mdse Inventory					
Accrued Inc Not Due					
Interest					
Rent					
Total	(—%)	(—%)			
Working Assets					
Supplies Inventory					
Deferred Expense					
Insurance					
Ext Repairs					
Advances to Agents					
Total	(—%)	(—%)			
Investment of Reserves					
Bond Sinking Fund					
Replacement Fund					
Total	(—%)	(—%)			
Permanent Investments					
Securities in A B C Co					
Advances to G H Co					
Total	(—%)	(—%)			
Fixed Assets					
Land					
Buildings					
Furniture and Fixtures					
Plant					
Equipment					
Goodwill					
Totals	(—%)	(—%)			
Grand Total Assets					



<i>Liabilities and Proprietorship</i>				
Current Liabilities	1918	1917	Increases	Inc %
Notes Payable				
Accounts Payable				
Accrued Accounts Payable				
Interest				
Rent				
Taxes				
Totals	(—%)	(—%)		
Deferred Income				
Royalties				
Rent				
Total	(—%)	(—%)		
Fixed Liabilities				
Bonds				
Mortgages				
Notes (Long-term)				
Totals	(—%)	(—%)		
*Capitals				
A's Capital				
B's Capital				
C's Capital				
Total	(—%)	(—%)		
Grand Total Liabilities	(—%)	(—%)		

## ILLUSTRATION NO 21

*Account Form of Balance Sheet*

## VALLEY FURNITURE COMPANY

BALANCE SHEET, DECEMBER 31, 1918

(The per cents are of total assets or total liabilities)

<i>Assets</i>	<i>Liabilities and Proprietorship</i>
Current	Current Liabilities
Cash	Notes Payable
Notes Receivable	Accounts Payable
Accounts Receivable	Accrued Accounts Pay
Mdse Inventory	Interest
Accrued Income Not Due	Rent
Interest	Taxes
Rent	Total
Total	(—%)

\* For a corporation this section would be as follows

Capital	1918	1917	Inc	Inc %
Capital Stock Common				
Capital Stock Preferred				
Appropriated Surplus				
Surplus				
Total	(—%)	(—%)		

Working Assets		Deferred Income	
Supplies Inventory		Royalties	
Deferred Expense		Rent	
Insurance		Total	(—%)
Ext. Repairs			
Advertising		Fixed Liabilities	
Advances to Agents		Bonds	
Total	(—%)	Mortgages	
		Notes (Long-term)	
		Total	(—%)
Investment of Reserves			
Bond Sinking Fund		*Capital	
Replacement Fund		A's Capital	
Total	(—%)	B's Capital	
		C's Capital	
Permanent Investments		Total	(—%)
Securities in A B C Co			
Advances to G H Co			
Total	(—%)		
Fixed Assets			
Land			
Buildings			
Furniture and Fixtures			
Plant			
Equipment			
Good will			
Total	(—%)		
Grand Total		Grand Total	

### QUESTIONS AND PROBLEMS

- 1 What are the purposes of the balance sheet?
- 2 Why does a creditor wish to see the balance sheet?
- 3 What are the classes of assets ordinarily found in the balance sheet?
- 4 Define each of the classes of assets and discuss the difference between the several classes
- 5 What are the different kinds of liabilities?
- 6 Define each class of liabilities and discuss the basis of the classification
- 7 Indicate the various ways in which assets are secured through the creation of liabilities or proprietorship

\* For a corporation this section would be as follows

Capital	
Capital Stock Common	
Capital Stock Preferred	
Appropriated Surplus	
Surplus	
Total	(—%)

8 Upon what assets does a business ordinarily rely for funds to meet the several classes of liabilities as they fall due?

9 To what other class of liabilities are deferred credits similar in their nature? To what class of creditors would the property or funds reserved by the creation of deferred credits finally be apportioned in the case of a successful dividend producing property?

10 How would the balance sheet be used by a prospective creditor for the purpose of determining the advisability of an additional extension of credit for the purchase of more merchandise?

11 How would the balance sheet be used by a bank in determining whether it should extend short-time loans to be invested in current assets and working assets?

12 What are net current assets, and what is their significance to creditors in determining the advisability of granting a request for additional loans?

13 What useful information may a manager secure from the comparative balance sheet in the determination of financial policy?

14 How often should the manager require a balance sheet? Why?

15 What factors have a bearing on the question of the order in which the respective groups of assets should be placed in the balance sheet?

16 Why might it be more desirable to have a railroad balance sheet with the fixed property investments and permanent liabilities listed first?

17 What factors have a bearing on the determination of the order in which items should be listed in the balance sheet?

18 Make the necessary arrangements and corrections to place the following comparative revenue statement and balance sheet in the best form

### THE NATIONAL FARM MACHINERY COMPANY

#### REVENUE STATEMENT

	1918	1919
Harvesting machinery, tillage instruments and twine		
United States	34,616,559	37,730,448
Foreign Countries	<u>22,894,797</u>	<u>25,202,914</u>
Total	<u>57,511,356</u>	<u>62,933,362</u>
Wagons, manure spreaders, gasoline engines, cream separators, auto wagons, tractors		
United States	15,480,607	18,772,535
Foreign Countries	<u>5,239,578</u>	<u>8,993,142</u>
Total	<u>20,720,185</u>	<u>27,765,677</u>
Stool Products, fibre sales, etc	<u>8,383,068</u>	<u>10,467,320</u>
Total Sales	86,614,549	101,166,359
Miscellaneous Earnings and Charges	<u>869,767</u>	<u>828,529</u>
Total Income	87,484,316	101,994,888

Deductions	1918	1919
Cost of Manufacturing and Distributing	64,050,314	76,641,370
Ordinary Repairs and Maintenance	2,244,404	2,911,945
Experimental, Development and Patent Expenses	474,515	567,933
Administrative and General Expenses	580,753	610,883
Interest on Loans	558,056	1,003,981
Appropriations for Fire Insurance Fund	250,000	250,000
Appropriations for renewals and minor improvements	567,152	575,000
Reserve for Pension Fund	250,000	250,000
Reserve for Industrial Accident Fund		250,000
Reserve for plant depreciation and ore extinguishment	1,827,382	1,848,957
Reserve for contingent losses and collection expenses on receipts	880,000	1,000,000
Total Deductions	72,591,576	85,010,069
Net Profit	14,892,710	10,084,810
Preferred Dividends	4,200,000	4,200,000
Common Dividends		3,200,000
	4,200,000	7,400,000
Balance of undivided profits	10,692,740	8,684,810

## NATIONAL FARM MACHINERY COMPANY

## COMBINED STATEMENT OF PROFITS

1909-1910

*Balance Sheet, December 30*

	1909	1910
Current Assets		
Raw Materials and Products	53,399,926	61,646,435
Notes Receivable	46,212,036	55,506,547
Cash	5,426,600	105,038,652
		4,561,171
		121,714,153
Current Liabilities		
Bills Payable	5,824,750	13,778,045
Accrued Payables	5,090,531	7,913,112
Purchase Money Obligations	2,250,000	1,125,000
Dividends Payable	1,050,000	14,215,128
		1,050,000
Net Current Assets	90,823,371	97,847,996
Fixed Assets		
Real Estate, Plant, etc	66,532,609	71,887,402
Insurance Fund Assets	1,070,862	1,514,313
Advance Payments on Royalties	153,419	67,766,890
		190,215
		73,591,930

Fixed Assets plus Net	1909	1910
Current Assets	158,580,261	171,439,926
Capital Stock		
Prfd Stock	60,000,000	60,000,000
Preferred Stock	60,000,000	60,000,000
Common	60,000,000	80,000,000
Misc Reserves	<u>11,195,531</u>	<u>14,540,377</u>
Surplus	27,384,730	16,899,549

19 TRIAL BALANCE OF KING MDSE CO  
FOR YEAR ENDED DECEMBER 31, 1920

Cash	\$2,000 00	
Accounts Receivable	18,250 00	
Reserve for Bad Debts		25 00
Mdse Inventory	15,000 00	
Delivery Equipment	7,500 00	
Delivery Equipment Depreciation Reserve		525 00
Furniture and Fixtures — Depreciation Reserve		100 00
Furniture and Fixtures	2,500 00	
Land	10,000 00	
Building	25,000 00	
Building — Depreciation Reserve		1,000 00
Notes Payable		9,000 00
Accounts Payable		7,500 00
Mortgage Payable		25,000 00
John King, Capital		26,800 00
Merchandise Sales		100,000 00
Return Sales and Allowances	300 00	
Interest Received		475 00
Merchandise Purchases	63,000 00	
Return Purchases		425 00
Administration Salaries	12,700 00	
Administration Expense — general	3,500 00	
Advertising	2,500 00	
Salaries of Salesmen	4,750 00	
Miscellaneous Selling Expenses	750 00	
Operation of Delivery Service	1,950 00	
Repairs on Delivery Equipment	350 00	
Interest Paid	400 00	
Discount on Sales	500 00	
	170,950 00	\$170,950 00

ADJUSTING ENTRIES, DECEMBER 31, 1920

Merchandise Inventory	18,500 00
Bonus to Salesmen allowed on year's service	475 00
Deferred Expense Items	
Operation of Delivery Service	125 00
Repairs on Delivery Equipment	350 00

Accrued Accounts Payable	
Interest	135 00
Salesmen's Salaries	525 00
Depreciation Allowed	•
4% on Buildings, 7% on Delivery Equipment, 5% on Furniture and Fixtures	
Deferred Expense Items	
Advertising	400 00
Repairs on Delivery Equipment	85 00

- (a) Journalize the adjusting and closing entries as at the close of 1919
- (b) Make comparative revenue statement, taking the figures from the preceding chapter for 1919
- (c) Comment on the explanation of the increases in revenue items in so far as any inference can be drawn

## CHAPTER XIV

### INTERNAL ANALYSIS OF BALANCE SHEET AND REVENUE STATEMENT

**1. Method of Internal Analysis.** — In the preceding chapter conclusions were, in general, drawn from a comparison of certain items of the revenue statement as shown in the report of a given year with the similar items shown in a report of a corresponding preceding year. This method of comparison is of value in determining to what extent a business is making improvement from period to period over its results as shown by preceding periods. It is possible, however, to construct certain ratios and certain comparisons in the case of a balance sheet that are significant from a credit point of view and from a point of view of the condition of the business, by comparison of certain items of the periodical report with certain other items for the same period.

For example, if the net worth of a business as shown by the balance sheet has a ratio to the total of fixed assets equal to one, this indicates that the proprietors have themselves invested an amount in the business equal to the total investment in fixed assets. Of course, further analysis could be made by deducting from fixed assets the net worth for the purpose of showing the amount of proprietary investment in current assets. This amount could likewise be reduced to percentage, showing the per cent of current assets provided for by the investment of the proprietors. Likewise, the ratio of the net sales of a business to the accounts receivable at a particular date would have a distinct value in indicating the readiness of collection of the proceeds of sales. If the ratio is very high, say 500%, this would indicate that one fifth of the sales for the period were not collected at the end of the period. If the period were a year and the sales were credit sales, one would judge that accounts on an average ran something over sixty days

If the percentage of sales were over 1000, as is the case in the packing industry, and sales were, in general, made on time, this would indicate that accounts receivable on an average run between thirty and sixty days.

If the ratio of sales for a year to the average merchandise inventory at sale price be high, this would indicate that there is a rapid turnover of goods, and that consequently a business man could afford to lend money for the purchase of such merchandise, because of its ready conversion into cash. At the same time, however, a low ratio of sales to receivables would indicate slow collections and would tend to make a given amount of merchandise stand for a smaller amount of credit.

If in any particular business the ratio of sales to net worth were high, this would indicate a low investment on the part of the proprietors, considering the volume of sales, and in case the ratio of net worth to fixed assets is at the same time low, a satisfactory profit could be made by a small differential on each unit of goods sold. The business would also tend to be satisfactory from the standpoint of commercial credit advances. The ratio of total liabilities to net worth in terms of per cent indicates the comparative amount of investment by the proprietors in contrast to that of outside parties.

**2. A Comparison of Ratios for Various Industries.** — A list of industries will be found in the table below ranked according to the ratio of current assets to current liabilities. This ratio is sometimes spoken of as the *current ratio*. It is high in the case of farm implements. It is not safe in such an industry where collections are comparatively slow that current liabilities shall be so high as compared with current assets as they are in other industries more favorably situated in this respect. It is found that the current ratio is low in the case of the packing industry. Current liabilities can be very high as compared with current assets in the packing industry because there is a rapid turnover and also ready collections. This rapid turnover will also be found to exist in the case of the packing industry as compared with other industries by reference to the sales-merchandise inventory column in the table below. On the



other hand, this ratio is very low in the case of the farm implement business. In the table below it is generally true that if the current ratio is low the turnover or sales-merchandise inventory ratio will be high. It would further tend to be true that the ratio of sales to receivables in such cases will also be high. The table below showing these various ratios was constructed from data furnished by Alexander Wall and published in the Federal Reserve Bulletin for March 1, 1919, page 243. See Table A on opposite page.

**3. Ratios and Comparison of Periods.** — While the percentages described in Table A have particular value for the purpose of determining the credit standing of a business, they also have value from a managerial point of view. If a banker or creditor has apprehension concerning the prosperity and financial stability of a business, the managers themselves should take precautions so to improve the affairs of the business that it will command confidence and show a more prosperous condition.

Table A illustrates one of the methods of setting standards for the relative status of various items in the periodic reports of a business. If it is found that the average status of items for widely distributed prosperous concerns show certain percentages and relations, one is justified in raising questions in regard to the advisability of a set of ratios for his own business varying widely from those commonly found.

It may not be feasible to change the status of various items suddenly. The comparative report shows the progress being made from period to period in improving the standing of a business.

**4. Ratios Representing Prosperity.** — One of the ratios commonly used to indicate the degree of the prosperity of a business is not found in Table A. The ratio of net profits to net worth indicates the percentage of earnings which the business yields to the proprietors. If this percentage is increasing from year to year it is the best possible proof of successful management. But one of the chief methods of running up this ratio is to increase the column of ratio of sales to merchandise. The manager should see to it that the business does not carry a superfluous stock of any item of merchandise considering such

TABLE A—NATIONAL TYPE RATIOS

Types	No of State- ments	Current Ratio Per Cent	Special Current Ratio	Receivable Turnover	Worth— Fixed	Sales— Receivable	Sales— Mdsf	Sales— Worth	Debt— Worth
Dry Goods	83	223 38		84 61	357 27	462 10	391 03	272 23	63 66
Boots and Shoes	66	225 40		72 04	259 07	503 12	362 40	278 89	65 21
Packers	19	235 49	160 65	80 75	183 88	1027 30	829 57	483 27	80 56
Grocers	205	257 98		71 00	339 71	788 06	564 25	399 47	59 14
Tanners	28	246 86		49 57	283 51	502 81	293 86	216 42	50 86
Lumber	54	259 08		82 37	181 73	445 18	366 87	147 18	32 50
Drugs	21	269 35		41 21	141 65	847 96	349 48	136 05	21 35
Hardware	99	283 95		60 29	394 11	543 50	327 73	227 78	42 98
Farm Implements	20	355 78		63 50	191 17	329 62	209 33	102 84	38 45

EXPLANATION OF TABLE A

- 1. *Number of Statements* — The statements were furnished by commercial paper brokers and also by banks and represent the respective businesses in widely distributed areas of the United States
- 2. *Current Ratio Per Cent* — This represents the ratio of current assets to current liabilities expressed as a percentage
- 3. *Special Current Ratio* — This shows a specially low current ratio existing in the packing industry in one section of the country
- 4. *Receivables—Merchandise* — This column shows the ratio of the receivables at the date of the reports to the merchandise inventory expressed in percentage
- 5. *Worth—Fixed* — This column shows the ratios of net worth to fixed assets in the several industries The data in this, as in the case of the other items, represent industries widely distributed over the country
- 6. *Sales—Receivable* — The figures in this column show the ratio of sales to receivables expressed in percentage
- 7. *Sales—Merchandise* — The figures in this column show the ratios of sales to merchandise inventory expressed in percentages This ratio is sometimes spoken of as the turnover For an accurate merchandise turnover, however the merchandise should be inventoried at sale price
- 8. *Sales—Worth* — The figures in this column show the ratios of sales to net worth expressed in percentages
- 9. *Debt—Worth* — The figures in this column show the ratios of total debt to net worth expressed in percentages and serve to compare the amount of funds furnished by outside parties to the amount furnished by proprietary interests

factors as time required to replenish stock and economy of quarterly orders. An attempt to increase the ratio of sales to merchandise inventory will require some standardized program of maximum and minimum of stock to be carried in the various lines of merchandise and supplies.

An improvement in the collection program might decrease the ratio of receivables to merchandise and thus improve the credit position of a company and decrease the losses from bad debts.

One of the reasons for receiverships and bankruptcies lies in the fact that the ratio of debt or liabilities to net worth is unreasonably high. The remedy lies in a larger proprietary investment. When a receivership occurs for this reason, a reorganization should set up a balance sheet showing a smaller ratio of liabilities to net worth.

In Mr. Wall's studies these ratios were also compiled by sections of the country as well as by industries. The value of the whole study, however, lies more in the method than in the results, although the results themselves might be taken subject to corrections and further modification to be made on the basis of a study of the particular problems of the given business.

**5. Limitations of Statistical Analysis.** — Accounting statistics never tell the whole story in regard to the credit position or even the future prospects of a business concern. The experience, character, and intelligence of the manager are always of great importance. Moreover, the character of employees, local competition, and the general business situation are all matters of consequence in gauging the future prospects of an enterprise.

### QUESTIONS AND PROBLEMS

1. What is the use of the ratio of net profits to proprietary investment, expressed in per cent?
2. Define and discuss the use of each of the eight ratios discussed in the text.
3. What facts outside statistical analysis are important in gauging the credit and future prosperity of a business?
4. Presuming the John Smith business referred to in the Questions and Problems at the end of the two preceding chapters to be a dry goods business, discuss its peculiarities and analyze the credit position and prospects of the enterprise.

## CHAPTER XV

### CONTROLLING ACCOUNTS AND COLUMNAR BOOKS

**1. The Nature of a Controlling Account.** — If all customer accounts and all creditor accounts were kept in the general ledger, it would become a very large and unwieldy book in the case of a large business. It is customary, therefore, to eliminate from the general ledger all detail customer accounts and all detail creditor accounts, and to insert in their stead a general controlling account for customers and a general controlling account for creditors. The detail customer accounts are then kept in what is called the sales ledger and the detail creditor accounts are kept in what is called the purchase ledger or creditors' ledger. These customer accounts are then represented in the general ledger only in totals. The controlling account for the customers' ledger would be called accounts receivable and the controlling account for the purchase ledger would be called accounts payable. There would be charged to the accounts receivable controlling account in total all of the charges which are made in detail to the individual customer accounts. Likewise, there would be credited to the accounts receivable account the total of all credits which are made in detail to the individual customer accounts. It is clear then that the balance of the accounts receivable controlling account would be equal to the sum of the balances of the individual customer accounts in the sales ledger. In the same way, the total of the credits posted to the individual creditor accounts is posted in total to the credit of the accounts payable controlling account. Likewise the total of debits which are posted in detail to the debit of the particular creditor accounts is posted to the debit of the accounts payable controlling account. It would then be true of course that the balance of the accounts payable controlling account would be equal to the sum of the balances of the indi-

vidual creditor accounts which would be found in the purchase ledger. In taking the trial balance the details in the purchase ledger and in the sales ledger can be omitted, since the accounts receivable controlling account represents a summary of the individual accounts in the sales ledger and the accounts payable controlling account represents a summary of the individual accounts in the purchase ledger. If these controlling accounts and all of the other general ledger accounts make a balancing trial balance when taken from the general ledger, the general ledger accounts are probably correct. If then the sum of the balances of the individual accounts in the sales ledger are not equal to the balance of the accounts receivable controlling account, some of the individual accounts are probably in error. The clerk who keeps the customers' ledger would then be advised to check the entries in his ledger for the purpose of discovering the error. It would similarly be true that some of the accounts in the purchase ledger would likely be in error if the sum of the balances of these individual accounts should not be equal to the balance of the accounts payable controlling account. The clerk who keeps the purchase ledger would be directed, in such a case, to check the entries in the purchase ledger for the purpose of discovering the error. The control ledgers would be regarded as correct when the sum of the balances of the individual accounts in the customers' ledger were equal to the balance of the accounts receivable controlling account, and the sum of the balances in the purchase ledger were equal to the balance of the accounts payable controlling account in the general ledger.

**2. Columnar Journals.** — In a business of considerable size it is customary to provide the journals of original entry with columns which will serve to collect all of the charges to the controlling accounts receivable account and likewise the credits to this account, and similarly it is customary in such a business to create columns in the books of original entry which will provide for the collection in columns of the debits and credits to accounts payable. For example, the total of credit sales as recorded in a sales journal or a sales ledger can be collected

into one column headed accounts receivable. The total of this column for a given month would be the total of debits to the controlling account of accounts receivable which arise from credit sales to customers. Now the credits to the controlling account would arise in connection with receiving cash on account from individual customers. It would therefore be necessary to have on the debit side of the cash journal a column designated accounts receivable, in order that all of these payments on account might be collected in a column and added for a period such as a month, so that the total might be carried to the credit of the accounts receivable controlling account in the general ledger. Likewise in the general journal certain adjustments in the customer accounts might arise which would occasion debits to the accounts receivable controlling account and also credits to the same account. Consequently, a debit column for accounts receivable and a credit column for accounts receivable would be required in the general journal. A glance at the columnar books of original entry shown in Illustration No. 22 will show how the books of original entry are designed to provide columns for all debits to accounts receivable and all credits to that account which might arise from day to day in the entry of transactions.

A reference to Illustration No. 22 will further show the provision in the form of columns which it is necessary to make in the columnar books of original entry in order to provide for the accounts payable controlling account. Since these accounts payable arise in connection with purchases, the large volume of the credits to accounts payable may be collected by providing a special column with an accounts payable heading in the purchase journal or purchase register. The most of the debits to accounts payable arise in connection with payments on account which would be entered on the credit side of the cash journal. It is, consequently, necessary to have an accounts payable column on the credit side of the cash journal so that all of these debits may be collected and carried as one total to the debit of the accounts payable controlling account. The opening entry of a credit to accounts payable would ordinarily

appear in the general journal, and there may be adjusting entries which would likewise appear in the general journal, either as debits to the accounts payable controlling account or as credits to it. It will be desirable, therefore, to have in the general journal a debit column for accounts payable and also a credit column for accounts payable. If the student will stop at this point and review the illustration at the end of the chapter, it will readily appear just what columns have been provided in order to collect the information which is required for the two controlling accounts above described.

**3. Discount Columns.** — In the special journal which had only one column, a cash discount was ordinarily carried as a credit to cash, while the total of the balance of the customer accounts was represented as being received on the debit side of the cash journal. It will readily appear that each of such discounts on customers' accounts required a posting to the debit of *discount on sales*. Of course the credit to cash was automatically made by the entry of the item on the credit side of the cash journal. Now all of this detail posting and also the repetition of the description of the original entry may be saved by the creation of a column of *discounts on sales* on the debit side of the cash journal. The total of the amount of the balance of the customer's account may then be entered in the accounts receivable column on the debit side of the cash journal when the customer pays his account, and the amount of the discount which the customer receives may be entered in the parallel column, so that the net balance of cash received is carried over into the *cash deposits* column. It would be clear that no description is necessary, except the description at the head of the column. It would further be clear that no posting is required then except the posting of the total of the column of the discounts on sales when the books are closed. See illustration of cash journal in Illustration No. 22, page 204.

In the same way, the *discounts on purchases* are provided for by a column on the credit side of the cash journal, so that when the total of a bill is entered in the accounts payable column on the credit side of the cash journal, the discount appears in a

parallel column and the cash withdrawals in a third column shows the net amount of cash paid in settlement of the invoice. This column requires the detail entry of the account named at the head of the column only and one posting each time the books are closed. The use of the column eliminates the account entry for each of the discount items collected in the column. See cash journal, credit page, Illustration No. 22, page 205.

**4. Classification Columns.** — In the purchase and sales journals heretofore used, it was impossible to classify purchases or sales into groups of items. If the separation were made, it was necessary to post each sales item to a separate account and there was set up the sales classification into as many groups of items as might seem desirable. It is possible, however, by the use of columns to provide for a classification of sales and a classification of purchases in the books of original entry. It is necessary to provide as many columns in the sales register, or sales journal, as there are classes of sales. It is evident that the same classes of items would appear in the purchase journal as would appear in the sales journal, since the chief reason for classifying sales into groups is to secure a figure for gross profits on each class of items. See purchase register and sales register in Illustration No. 22. When sales and purchases are thus classified, it is necessary to post only the totals of the several columns to the purchase and sales accounts at the time the books are closed. Since *freight-in* is ordinarily regarded as a part of the cost of goods purchased, it becomes necessary to apportion *freight-in* between the classes of purchases set up in the purchase register if only one *freight-in* account is kept. It is sometimes feasible to distribute *freight-in* between the classes of purchases on the basis of the total purchases that are shown at the time of closing the books in the several classes provided for. In case this does not prove to approximate fairly the actual amount of freight incurred in connection with the purchases in question, the apportionment must be made on the basis of an estimate of the actual amount of freight incurred, and all the facts of the given case must be duly considered in making this estimate.



**5. Columnar Books.** — As we have seen, the introduction of separate books of original entry saves approximately fifty per cent of the postings to accounts in which the number of entries for any fiscal period is large. The use of columnar books not only extends this saving, but provides the basis for what are known as controlling accounts.

**6. Columnar Cash Journal.** — In the ordinary cash book containing but a single debit and a single credit column, it is necessary to write the cash discount on the side opposite the entry of the purchase or sale and to post each individual discount to the ledger. By adding, however, a column for discounts on purchases next to the credit column, it is possible merely to enter the amount of the discount in the proper column, and to post the total of each as a single item to the appropriate ledger account. Thus, by adding to the ordinary cash journal a number of columns and by putting as the headings of these columns the names of the accounts to which debits and credits are most frequently made, we save not only in the number of ledger postings but also in the number of account entries in the cash book, the entry of the amounts in the proper columns obviating the insertion of the account names.

The ruling of the ordinary columnar cash book is shown in Illustration No. 22 below. When cash is received on account, the amount of the invoice is entered in the *Accounts Receivable* column, and, in the absence of a cash discount, also in the *Deposit* column. When a cash discount is allowed, the amount of the invoice is entered, as before, in the *Accounts Receivable* column, the amount of the discount in the *Discount on Sales* column, and the net cash received, or the amount of the invoice less the cash discount, in the *Deposit* column. Similarly, payments on account, when no cash discount is taken, are entered in the *Accounts Payable* and *Withdrawal* columns. The *Deposit* and *Withdrawal* columns thus represent the debits and credits to cash.

**7. Columnar Purchase Journal.** — In the ordinary purchase book or register, there is frequently only one money column

showing the amount of merchandise purchases. When such is the case, the total of this column is debited to the merchandise purchases account, the offsetting credits being posted in detail to the accounts of the concerns from which the purchases are made. Quite often it is desirable to classify the various purchases, in order to determine the profits arising from each separate class. To do this with the ordinary purchase book, it is necessary to have as many purchase registers as there are items in the classification, with the result that a single invoice may involve a number of separate entries. Obviously, the same information is more readily supplied by means of additional columns in the purchase journal, whereby the total of the invoice may be entered in one column, and the amounts chargeable to the various classes in parallel columns to the right. The classification adopted will, of course, determine the number of columns to be used and the character of the purchase accounts to be kept on the ledger.

A form of columnar purchase journal, ruled to fit the transactions of the particular example, is shown in Illustration No 22, below. The total of the *Accounts Payable* column represents the aggregate of the detailed postings to the credit of the individual accounts payable, while the totals of the *Furniture* column and the *Mattresses* column show the amounts to be debited to the corresponding ledger accounts, these two accounts replacing the single account of merchandise purchases.

**8. Columnar Sales Journal.** — A columnar sales journal ordinarily follows the classification of the columnar purchase register, or *vice versa*. Thus, in the form of the sales journal illustrated below, the sales are divided into furniture sales and mattress sales to correspond with the purchase classification established in the purchase journal. The total of the *Accounts Receivable* column represents the aggregate of the detailed postings to the debit of the various individual accounts receivable, while the totals of the columns representing furniture and mattress sales denote the amount to be credited to the corresponding ledger accounts, which together replace the merchandise sales account.

**9. Columnar General Journal.** — With the use of the various columnar books, the number of entries in the general journal becomes comparatively small. It contains, as explained before, merely the opening, closing, adjustment entries, purchases involving expense, and such other entries as are not provided for in the separate columnar journals. A form of general journal meeting the requirements of the transactions involved is shown in Illustration No. 22, page 200.

It will be noticed that the columnar headings for the journal are similar to the headings found in the columnar cash book, the columnar purchase register, and the columnar sales register. The *Accounts Payable* column provides for transactions affecting creditors other than merchandise creditors and for entries affecting the accounts of the latter arising out of adjustments rather than from purchases or payments on account. Thus, purchases of machinery and equipment and of other fixed assets are entered in the general journal. The *Accounts Receivable* column, on the other hand, provides for credit sales of fixed assets and for adjustment in accounts receivable.

**10. Return Purchases and Sales.** — Where the volume of return purchases and sales is large, it is of advantage to the manager to have the data entered in separate accounts under the headings *Returns and Allowances on Purchases* and *Returns and Allowances on Sales*. For convenience, these accounts may be kept, respectively, in the back of the regular purchase and sales journals, the rulings of which are adapted to the purpose.

**11. Controlling Account Entries.** — A controlling account is a summary of a group of accounts of the same kind. Take, for example, the customer accounts, of which there may be a large number. If, along with these accounts, there is kept a separate account containing on the debit side the sum of all the debits to the customer accounts, and on the credit side the total of all the credits to the latter accounts, there results a controlling account or summary for accounts receivable. Obviously, the balance of the summary or controlling account is equal to the sum of the balances of the individual customer accounts of which the former is composed.

The creditor accounts may, of course, be summarized in precisely the same way. On the credit side of the controlling account in this case are entered in total the various credits to the individual creditor accounts, while on the debit side are entered in a lump the different debits to the latter accounts. The balance of the controlling account, therefore, is equal to the sum of the balances of the several individual accounts payable.

A special word of explanation is necessary in connection with the postings from the pages of the purchase and sales registers devoted to returns and allowances on purchases and sales. Manifestly, the commodity classifications and controlling account columns are identical in these special sections with those of the purchase and sales journals proper. The posting to the ledger of the totals of the controlling account columns is, however, radically different. In the purchase register, all accounts payable items are credits to the individual creditor accounts, and the total of these items a credit to the controlling creditor account. Goods purchased but returned, on the other hand, become a debit to accounts payable, and hence the accounts payable column of the purchase returns and allowances journal is posted as a debit to the account controlling accounts payable. Similarly, the accounts receivable column of the sales returns and allowances journal represents a credit to the controlling customer account, and not a debit, as does the accounts receivable column of the sales register.

**12. Purchase Ledger** — To derive the full advantage of a controlling account, all accounts covered by it should be grouped in a separate ledger. If all the purchase accounts are thus segregated, this subsidiary ledger becomes known as the purchase ledger, and the book heretofore called the ledger develops into what is termed the general ledger. In order that the general ledger may contain all the data needed for a trial balance, there is inserted in it, in place of the individual accounts which have been transferred to the purchase ledger, a summary or controlling account covering the various accounts payable. Consequently, the individual accounts payable no longer appear in the trial balance or in the balance sheet, but

are submitted as a separate schedule to show that the subsidiary ledger is in accord with the controlling account of the general ledger

As the sum of the balances of the individual accounts must equal the balance of the controlling account, it is clear that a difference in these amounts indicates that an error has been made either in the controlling account or in the purchase ledger. In case the trial balance proves correct, it is equally clear that the error must be sought in the individual accounts payable

**13. Sales Ledger.** — The sales ledger is created as another subsidiary ledger to be governed by the accounts receivable controlling account in the general ledger. If a trial balance taken from the general ledger shows an equality of assets and liabilities, any discrepancy between the sum of the balances of the sales ledger and the balance of the controlling account clearly indicates an error in the individual accounts receivable

**14. Value of Controlling Accounts.** — Because postings could be made in totals, much saving of time and effort was effected through the introduction of the merchandise purchases and merchandise sales accounts. They are in no sense, however, controlling accounts, there being no group of subsidiary accounts fully represented in total by either of them

Controlling accounts present a means of condensing into summary form in the general ledger a large number of accounts which are kept in detail in one or more subsidiary ledgers. Thus the general ledger remains a small book that can be easily used at any time for the purpose of taking a trial balance and calculating profits, without even attempting a balance of the various subsidiary ledger accounts. Should an error develop, it can be easily limited either to the general ledger or to one of the subsidiary ledgers. Without a controlling account, it would be necessary to check all of the accounts in order to locate the discrepancy. Moreover, as the subsidiary ledgers are usually placed in the hands of special clerks, only the general ledger clerk need know the general condition of the business, or whether it is succeeding or failing. The larger the business,

therefore, the more important becomes the use of controlling accounts

**15. Interest in the Columnar Cash Journal.** — In the ordinary cash journal with only one column for debits and another for credits, the most feasible plan is to enter the discount of a note payable on the credit side and the face of the note on the debit side. There are objections, however, to this procedure, as it increases the total of deposits as indicated by the cash journal to an amount larger than the total as shown by the bank pass book, although the balances of these two books should be the same when all checks issued have been cashed by the bank. Usually, however, a number of checks issued toward the end of the month remain outstanding when the bank book is balanced and returned, making a reconciliation between the pass book and the cash book necessary. This reconciliation is obviously greatly facilitated when the total deposits and the total withdrawals are the same in both the cash and the bank account.

The desired result is easily accomplished in the columnar cash journal by entering the face of the note in the general column opposite the entry of notes payable as the account to be credited. The bank discount is then entered in red directly under the entry of the face of the note in the general column opposite the entry of interest as the account to be credited, the net amount of the note being entered in the deposit column. As the interest account is debited with the amount of the discount, this particular entry must be differentiated from the prevailing credits on the debit side of the journal by being written in red ink. Entries involving notes receivable discounted are, of course, made in the same way. An example will be found in Illustration No. 22, page 204.

**16. Illustration.** — The illustration given below is intended to show how items are entered in the different columnar books, how the books are used, how the postings to the controlling accounts are made, and how the books are closed at the time of taking a trial balance. Although the purchase and sales ledgers, showing the individual accounts of creditors and custom-

ers, are omitted to economize space, there is inserted below the balance sheet a list of the balances from these ledgers as supporting schedules for the balances of the controlling accounts.

#### TRANSACTIONS FOR ILLUSTRATION NO 22

John Smith and John Doe on January 1, 1919, begin conducting a general partnership under the firm name of the Central Furniture Store. John Smith invests \$10,000 00 and John Doe \$30,000 00, but they agree that three fourths of the profits and losses shall go to Doe and one fourth to Smith, and allow themselves salaries of \$40 00 per week each. They deal in furniture and mattresses, and keep their purchases and sales accounts with these two classes of goods. Their transactions are as follows:

- Jan 1 Purchases on credit Sample Furniture Co., 2/10, n/30, furniture, \$5,000 00, mattresses, \$2,000 00 — Haywood Furniture Co., 2/10, n/30, furniture, \$500 00, mattresses, \$250 00  
 Purchased office equipment for \$350 00 cash. Took out of stock additional office furnishings costing \$150 00  
 Purchased stationery for \$25 00 cash  
 Credit sales Valley Hospital, 2/10, n/30, furniture, \$750 00, mattresses, \$200 00 — W. H. Meyer, furniture, \$28 50, mattresses, \$7 50 — J. J. Hewitt, 2/10, n/30, furniture, \$400 00, mattresses, \$150 00  
 2 Cash sales, furniture, \$800 00  
 2 Purchased delivery truck for \$1,500 00 cash  
 6 Transactions for remainder of week entered under this date  
 Paid on account Sample Furniture Co., invoice of Jan 1, less discount, Haywood Furniture Co., invoice of Jan 1, less discount  
 Credit purchases T. & G. Morgan, furniture, \$6,000 00, mattresses, \$2,560 00 — H. E. Duncan, furniture, \$5,860 00, mattresses, \$1,850 00 — W. T. Hamer, furniture, \$7,280 00, mattresses, \$3,260 00  
 Received on account Valley Hospital, invoice of Jan 1, less discount — J. J. Hewitt, invoice of Jan 1, less discount  
 Purchased lot and building for \$10,000 00 from K. C. Jones Realty Co., of which \$3,500 00 was for the lot and \$6,500 00 for the building. The firm paid \$7,500 00 in cash and gave a five-year 8% mortgage for the balance.

- Purchased three tons of coal from the City Coal Co for office use, paying \$18 00 cash
- Paid for salaries Managers, \$80 00, R L Kaid, \$30 00, J P Johns, \$35 00, H R Salder, \$35 00
- Sales on credit, 2/10, n/30 J Collins, furniture, \$250 00—H P Henderson, furniture, \$160 00, mattresses, \$80 00—J H Brigham, furniture, \$250 00, mattresses, \$90 00—St Luke Hospital, furniture, \$2,750 00, mattresses, \$750 00 National University, furniture, \$5,600 00, mattresses, \$1,750 00
- Cash sales Furniture, \$8,500 00, mattresses, \$3,260 00
- 13 Transactions for the week ending on this date
- Paid on account T & G Morgan, \$6,000 00, H E Duncan, invoice less discount, W T Hamer, invoice less discount
- By agreement, the firm drew a 30-day draft on the St Luke Hospital for \$3,430 00, to cover account less discount, the hospital accepting the draft
- Discounted at 5 808% at the Central Trust Co the 30-day draft of the St Luke Hospital





13,650 00	General			
	General			
	Accounts Receivable			10,150 00
	Closing Entries		207	3,500 00
15 580 00	Mdse Inv Jan 13, 1919			
	Trading			
	Entering Mdse Inv end		210	15 580 00
	of period			
34,410 00	Trading			
	Furniture Purchases			24 400 00
	Mattress Purchases		20	9,920 00
	Closing purchase accounts			
	into Trading			
19,488 50	Furniture Sales			
6,487 50	Mattress Sales			
	Trading			
	Closing sales account into		210	25,976 00
	Trading			
7,146 00	Trading — Gross Profit			
	Profit and Loss — Gross			
	Closing Trading into Profit		210	7,146 00
	and Loss			
339 60	Profit and Loss			
	Discount on Sales		200	100 00
	Interest		200	16 60
	General Expense		210	25 00
97,101 60				96,903 60

## GENERAL JOURNAL

ACCTS PAY	ACCTS REC	GENERAL	Γ	13	F	GENERAL	ACCTS REC	ACCTS PAY
		97,101 00		Brought Forward		6,003 60		
				Office Expense	210	18 00		
				Office Salaries	210	180 00		
				Closing Expense Accounts				
				into Profit and Loss				
		520 00	210	Discount on Purchases				
				Profit and Loss				
				Closing Discount on Pur-	210	520 00		
				chase into Profit and Loss				
		7,320 40	210	Profit and Loss—Net Profit				
				John Smith, Capital (14)	208	1831 60		
				John Doe, Capital (34)	208	5,494 80		
				Closing Profit and Loss into				
				the Capital Accounts				
		104,048 00				104,048 00		



CASH BOOK DR

DATE	ACCOUNT	DETAIL	F	GENERAL	ACCOUNTS RECEIVABLE	DISCOUNT ON SALES	BANK DEPOSITS
1919 Jan	John Smith, Capital	Investment	208	10,000 00			10,000 00
	John Doe, Capital	Investment	208	30,000 00			30,000 00
6	Valley Hospital	Cash Sales	✓	1,000 00			1,000 00
	J J Hewitt	Settlement Acct	SL		950 00	19 60	931 00
		Settlement Acct	SL		550 00	11 00	539 00
13	Notes Rec Disc	Cash Sales	✓	11 760 00			11,760 00
	Less Interest		207	3,430 00			
			✓	16 50			3,413 40
	Cash Dr			36 100 00	1,500 00	30 00	57,643 40
	Interest Dr		✓	57,643 40			
	Disc on Sales		209	16 50			
	General		209	30 00			
	Accts Rec Cr		✓		56 190 00		
			207		1 500 00		
13	Cash deposits			57 600 00	57,600 00		
				57 643 40			
14	Balance			57 643 40			
				16,500 40			

## CASH BOOK CR

DATE	ACCOUNT	DETAIL	CHK No	F	GENERAL	ACCOUNTS PAYABLE	DISC ON PURCHASES	BANK WITH- DRAWALS
1918	Furniture and Fixtures	Central Drug Co	1	208				
Jan	General Expense	Johnson Stat	2	210	550 00			350 00
	Delivery Lquipment	Valley Garage	3	208	25 00			25 00
	Sample Furniture Co	On account	4	PL	1 500 00			1 500 00
	Haywood Furniture Co	On account	5	PL		7 000 00	140 00	6 860 00
	See Journal, p 1	K C Jones	6	V		750 00	15 00	735 00
	Office Expense	Cuty Coal Co	7	210	7 500 00			7 500 00
	Office Salaries	John Smith	8	210	18 00			18 00
		John Doe	9	210	40 00			40 00
		R L Kaid	10	210	40 00			40 00
		J P Johns	11	210	30 00			30 00
		H R Sadler	12	210	35 00			35 00
	T and G Morgan	On account	13	PL	35 00			35 00
	H E Duncan	Settlement acct	14	PL		6 000 00		6 000 00
	W T Hamer	Settlement acct	15	PL		7 710 00	154 20	7 555 80
						10 540 00	210 80	10 329 20
	General				9 573 00	32 000 00	520 00	41 053 00
	Accounts Payable			V	9 573 00			
	Discount on Purchase			208	32 000 00	520 00		
	Cash			210		41 053 00		
	Cash Withdrawals			V	41 573 00	41 573 00		
	Balance				41 053 00			
					16 590 40			
					57 643 40			

SALES REGISTER

		TERMS	SALES S No	F	ACCOUNTS RECEIVABLE	CASH SALES	FURNITURE	MATTRESSES
1919	1							
Jan		2, 10 n, 30	1	SL	950 00		750 00	200 00
		Cash	2	SL	36 00	1 000 00	28 50	7 50
	6	2 10 n, 30	3	✓			800 00	200 00
		2, 10 n, 30	7	SL	550 00		400 00	150 00
		2, 10 n, 30	8	SL	250 00		250 00	
		2, 10 n, 30	9	SL	240 00		160 00	80 00
		2 10 n, 30	10	SL	340 00		250 00	90 00
		2, 10 n, 30	11	SL	3,500 00		2,750 00	750 00
		Cash		✓	7,350 00	11,760 00	5,600 00	1,750 00
							8,500 00	3,260 00
	13			207	13,216 00	12,760 00	19,488 50	6,487 50
		Accounts Receivable						
		Cash			13,216 00			
		Cash Sales — See Cash Journal						
		Furniture Sales		✓	12,760 00	19,488 50		
		Mattress Sales		209		6,487 50		
				209				
					25,976 00	25,976 00		

# GENERAL LEDGER

F NOTES RECEIVABLE					F				
1919					1919				
Jan	13		J200	3430 00					

## NOTES RECEIVABLE DISCOUNTED

					1919				
					Jan	13		C204	3430 00

## ACCOUNTS RECEIVABLE

1919					1919				
Jan	13	8216 8206	13216 00		Jan	13		C204	1500 00
						13		J201	3500 00
									5000 00

## MDSF INVENTORY

1919									
Jan	13		J201	15580 00					

## LAND

1919									
Jan	6		J200	3500 00					

## BUILDINGS

1919									
Jan	6		J200	6500 00					



## ACCOUNTING PRINCIPLES

## FURNITURE AND FIXTURES

F

F

1919						1919					
Jan	13		J200	150	00						
	1	500	C205	350	00						

## DELIVERY EQUIPMENT

1919											
Jan	2		C205	1500	00						

## ACCOUNTS PAYABLE

1919						1919					
Jan	13		C205	26000	00	Jan	13	2500	P203	34500	00
	13		C205	6000	00						

## MORTGAGE (NOTES) PAYABLE

						1919					
						Jan	6		J200	2500	00

## JOHN SMITH, CAPITAL

1919						1919					
Jan.	13	Balance		11831	60	Jan	1			10000	00
							13	Net Profit (4)	J202	1831	60
				11831	60					11831	60
						Jan	14	Bal Cap		11831	60

## JOHN DOE, CAPITAL

1919						1919					
Jan.	13	Balance		35494	80	Jan	1			30000	00
							13	Net Profit (4)	J202	5494	80
				35494	80					35494	80
						Jan	14	Balance		35494	80

# CONTROLLING ACCOUNTS AND COLUMNAR BOOKS 209

## FURNITURE PURCHASES

F				F			
1919				1919			
Jan	13	P203	24640 00	Jan	13	Trading	J200 150 00
							J201 24490 00
			24640 00				25640 00

## MATRIS PURCHASES

1919				1919			
Jan	13	P203	0920 00	Jan	13	Trading	J201 0920 00

## FURNITURE SALES

1919				1919			
Jan	13	Trading	J201 10488 50	Jan	13		S206 10488 50

## MATRIS SALES

1919				1919			
Jan	13	Trading	J201 6487 50	Jan	13		S206 6487 50

## DISCOUNT ON SALES

1919				1919			
Jan	13	J200	70 00	Jan	13	Profit & L	J201 100 00
	13	C205	30 00				
			100 00				100 00

## INTEREST

1919				1919			
Jan	6	C205	16 60	Jan	13	Profit & L	J201 16 60

## ACCOUNTING PRINCIPLES

## DISCOUNT ON PURCHASES

F

F

1919					1919				
Jan	13	Profit & L	J200	520 00	Jan	13	C206	520 00	

## GENERAL EXPENSE

1919					1919				
Jan	1		C206	25 00	Jan	13	Profit & L	J201	25 00

## OFFICE EXPENSE

1919					1919				
Jan	6		C205	18 00	Jan	13	Profit & L	J201	18 00

## OFFICE SALARIES

1919					1919				
Jan	6		C205	180 00	Jan	13	Profit & L	J201	180 00

## TRADING

1919					1919				
Jan	13	Fur Purch	J201	24400 00	Jan	13	Adse Inv end	J201	15580 00
		MattressPur	J201	9020 00			of period	J201	10488 50
		Gross Profit	J201	7146 00			Fur Sales	J201	6487 50
							Mattress	J201	41556 00
							Sales		
				41556 00					

## PROFIT AND LOSS, JAN 1 TO JAN 13, 1919

1919					1919				
		Dis on Sales	J201	100 00			Gross Profit	J3	7146 00
		Interest	J201	16 60			Disc on Pur	J200	520 00
		Gen Exp	J201	25 00					
		Office Exp	J201	18 00					
		Off Salaries	J201	180 00					
		Net Profit	J202	7326 40					
				7666 00					7666 00

BALANCE SHEET, CENTRAL FURNITURE STORE, JANUARY 13, 1919

<i>Assets</i>		<i>Liabilities</i>	
Cash	16,590 40	Accounts Payable	2,560 00
Accounts Receivable (See A)	8,216 00	Mortgage Payable	2,500 00
Notes Receivable	3,430 00	John Smith, Capital	11,831 60
Less Notes Rec Dis	<u>3,430 00</u>	John Doe, Capital	35,494 80
Merch Inventory	15,580 00		
Delivery Equipment	1,500 00		
Furniture and Fixtures	500 00		
Land	3,500 00		
Buildings	6,500 00		
	\$52,386 40		\$52,386 40

*Schedule A*

Accounts Receivable	
W H Meyer	\$36 00
J Collins	250 00
H P Henderson	240 00
J H Brigham	340 00
National University	<u>7,350 00</u>
	8,216 00

*Schedule B*

Accounts Payable	
T and G Morgan	\$2,560 00

QUESTIONS AND PROBLEMS

- 1 Describe the accounts receivable controlling account, showing what debits and credits are made to the account
- 2 Give the same treatment to the accounts payable controlling account
- 3 Show what advantages accrue from these controlling accounts
- 4 Show the amount of economy arising from the introduction of the column for *discounts on sales* and the column for *discounts on purchases*

5 The firm of Pelton and Winslow keeps the following books Journal, with these columns Accounts Payable, Dr, Accounts Receivable, Dr, General, Dr, General, Cr, Accounts Receivable Cr, Accounts Payable, Cr

Cash Book, with columns as follows Debit side General, Accounts Receivable, Discount on Sales, Bank Deposits, credit side General, Accounts Payable, Discount on Purchases, Bank Withdrawals

Sales Register, Purchase Register, Returned Sales Register, all with these columns Amount, Farm Implements, Hardware

The bookkeeper starts to post the books and takes a trial balance *After* he posts all the details in the general columns of the cash book, the journal and the individual items in the Sales, Purchase, and Returned Sales Registers

and *before* he posts any of the footings in the books of original entry, the balances in the various accounts in the general ledger stand as follows

Henry Pelton, Capital		25,500 00
Charles Winslow, Capital		20,400 00
Furniture and Fixtures	493 00	
Horses and Wagons	475 00	
Henry Pelton, Drawing	184 12	
Charles Winslow, Drawing	234 35	
Notes Receivable	2,807 10	
Notes Payable		10,500 00
Farm Implements—Purchases	27,447 85	
Hardware Purchases	3,731 77	
Hardware Sales		2,417 80
Farm Implement Sales		1,610 10
Salaries	284 00	
General Expense	172 60	
Freight and Cartage In	517 32	
Freight and Cartage Out	58 75	
Advertising	325 00	
Interest	18 43	
Stationery and Printing	132 15	
Insurance	252 04	
Rent	100 00	
Stable Expense	34 30	
Notes Receivable Discounted		2,000 00
Wm Draper, Loan Account		6,000 00
Petty Cash	200 00	
	<u>37,467 78</u>	<u>68,436 90</u>

At the same time the footings in the books of original entry are as follows

Cash Book, Debits General 61,098 70, Accounts Receivable, 7,691 14, Discount on Sales, 128 84, Bank Deposits, 60,561 00

Cash Book, Credits General, 29,669 90, Accounts Payable, 37,774 35, Discount on Purchases, 899 17, Bank Withdrawals, 66,545 08

Journal Accounts Receivable, *Debit*, 1,899 02, General, *Debit*, 21,043 34, General, *Credit*, 20,583 66, Accounts Payable, *Credit*, 758 70, Accounts Receivable, *Credit*, 2,500 00

Sales Register Amount, 13,540 45, Farm Implements, 10,444 35, Hardware, 3,096 10

Purchase Register, Amount, 40,755 50, Farm Implements, 36,467 15, Hardware, 4 288 35

Returned Sales Register Amount, 125 00, Farm Implements, 90 00, Hardware, 35 00

Complete the postings and show the trial balance as it finally appeared

#### Suggestions

Remember that the details in the general column of each book have been posted, and that the totals of the general columns are not to be posted. A cash account is kept in the ledger under the name of the *Bank* at which deposits are made. Accounts receivable and accounts payable have not yet been opened in the ledger. Think carefully before making any postings, and be sure that the postings are made to the proper side of each account.

6. (a) *Sales Register* —Design a sales register to care for the sales of the Whitman Wholesale Company. All sales are made on the same terms 2/10, n/30. Sales are to be listed under the following heads: Men's Furnishings, Shoes, Clothing, Hats. Indicate the postings to be made at the end of the month.

(b) *Sales Register* —Design a sales register for the Hawthorne Stationery Company. This company does not care to departmentalize its sales, but wishes to keep trace of its sales according to terms. Its sales are made either to regular customers on account (there are two customers' ledgers, one for city accounts and one for country accounts), C O D, for cash, or on notes receivable. Indicate the postings to be made at the end of the month.

## CHAPTER XVI

### THE BILL BOOK

#### 1. The Bill Book as a Memorandum Book or as a Journal.

— Because of the large amount of information to be entered in connection with notes receivable and notes payable, a specially prepared book is used to make a proper record of them. This book, known as a bill book, may serve merely as a memorandum record to which the journals refer, or be used as one of the auxiliary journals of the business. The column headings for a notes receivable journal might be arranged as indicated below, thus providing for acceptances as well as promissory notes. The notes payable record would occupy a separate section of the same book, and require substantially the same ruling, the column *Accounts Credited* in the notes receivable record becoming *Accounts Debited* in the record of notes payable (See Illustration 23 and 23A below.)

The figures in the money columns with the ledger folio spaces to the left are the only amounts to be posted from the bill book in case it is used as a note journal. When a note is received, one or more accounts must be credited, and notes receivable debited for the face of the note. If partial payments are received on a note, these must be entered through the cash journal, though these payments should be noted in the bill book so that the balance unpaid may be readily calculated. It is of value also to have in the note journal a memorandum of the rate paid in connection with the discount of a note and of the name of the discounteer, even if the transaction itself must be journalized in the cash book. The rate is entered in a special column, and the name of the discounteer ordinarily in the *Remarks* column to the extreme right. If cash is received in connection with a note payable, the proper entry should be made at once in the cash journal and in the notes payable record,

and checked in both journals to indicate that no ledger posting is required

## TRANSACTIONS FOR ILLUSTRATION NO 23

1919

- Jan 1 Received from G B Sanders in full settlement of his account note (No 1) for \$200 00, dated Jan 1, 1919, and payable at the Valley National Bank three months after date, with interest at 8%
- 2 Received from John Doe in full settlement of his past-due account of \$145 00 and interest thereon of \$5 00 note (#2) for \$150 00, dated Dec 1, 1918, endorsed by Richard Roe, and payable at the Valley National Bank three months after date, with interest at 8%
- 3 Received from John Smith in full settlement of his account his 30-day draft (#3) for \$300 00, dated Jan 3, 1919, accepted by Wm Jones, and discounted it at 8% at the Valley National Bank
- 4 Received from John King in settlement of his \$500 00 account \$250 00 cash and note (#4) for the balance, dated Jan 4, 1919, and payable at the Valley National Bank 30 days after date, with interest from maturity at 8%  
Made a note to the Valley National Bank for \$500 00, 90 days, at 8% discount
- 8 Made a note of \$500 00 for 60 days at 7% in settlement of an account with the Sample Furniture Co
- 9 Accepted a 30-days' time draft for \$350 00 in settlement of an account with the Haywood Furniture Co, interest 6%, payable at First National Bank, Chicago



## ILLUSTRATION NO 23

## NOTES RECEIVABLE JOURNAL

[Left Page]

No	DATE RECEIVED	MAKER OR DRAWER	PAYEE	INDORSER OR DRAWER	WHERE PAYABLE	ACCOUNT CREDITED	LF	GENERAL	ACCOUNTS REC	NOTES REC
1	1919 Jan 1	G B Sanders	Valley Fur Store		Valley Natl Bank	G B Sanders				
2		Jno Doe	Valley Fur Store	R Roe	Valley Natl Bank	Jno Doe	a	5 00	200 00	200 00
3		Wm Jones	Valley Fur Store	Jno Smith	Valley Natl Bank	Interest Jno Smith	a		145 00	150 00
4		Jno King	Valley Fur Store		Valley Natl Bank	Jno King	a		300 00	300 00
							a		250 00	250 00
						Notes Rec General Accts Rec		5 00	805 00	900 00
							a	900 00		
							✓		5 00	
							a	000 00	805 00	
								000 00	000 00	

<sup>a</sup> The page of the ledger to which the posting is made would be inserted in each case where the letter *a* is found. The check mark (✓) indicates that the item is not posted

## ILLUSTRATION NO 23 — Continued

## NOTES RECEIVABLE JOURNAL

[Right Page]

Page 1 of 88

DATE OF MAKING	Time	DATE OF MATURITY												How Disposed Of					REMARKS		
		Year	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	RATE	AMOUNT COLLECTED	DATE	AMOUNT OF DISC		% RATE	PROCEEDS
1919 Jan 1	90	1919				1									8						
1918 Dec 1	90	1919			1										8						
1919 Jan 3	30	1919	31												8		Jan 3	\$2.00	8	\$298.00	Discount at Val Nat Bank 8% from maturity
Jan 4	30	1919		3											8						

## ILLUSTRATION NO 23 A

## NOTES PAYABLE JOURNAL

[Left Page]

No	DATE GIVEN	MAKER OR DRAWEE	PAYEE	INDORSER OR DRAWER	FOR WHAT GIVEN	WHERE PAYABLE	ACCOUNT DEBITED	L F	GENERAL	ACCTS PAYABLE	NOTES PAYABLE
1	1919 Jan 5	Valley Fur Store	Valley Nat Bank		Cash	Valley Nat Bank	Cash (see C J )	✓	588 00		600 00
2	8	Valley Fur Store	Sample Fur Co		On Acct	Center Nat Bank	Interest Sample Fur Co	a	12 00		
3	9	Valley Fur Co	Haywood Fur Co	Haywood Fur Co	On Acct	First Nat Bank Chi	Haywood Fur Co	a		500 00	500 00
									350 00	350 00	350 00
									600 00	850 00	1450 00
							Accounts Payable General Notes Payable	a	850 00 600 00		
								✓		1450 00	
								a	1450 00	\$1450 00	

a The page of the ledger to which the posting is made would be inserted in each case where the a appears The check mark ( ✓ ) indicates that the item is not to be posted



The foregoing transactions having been entered in the note journal, accounts receivable should be credited for \$895 00, interest with \$5 00, and the individual accounts listed under *Accounts Credited*, credited with the amount set opposite each, the ledger reference being entered in the folio column as the various postings are made. The notes should be numbered consecutively as entered on the record, and designated by number on the cash book entries when paid, so that reference to the record in the bill book may be quickly and easily made.

If used merely as a memorandum record, the bill book need have no folio column for the ledger posting. The notes in this case are entered in detail in the general journal, and are identified by their bill book number, so that the complete data concerning them may, if necessary, be obtained. In that case the money column would be Notes Receivable or Notes Payable, as the case might be, instead of the three money columns found above. Obviously, if a large number of notes is received, the bill book should be made an auxiliary journal rather than a memorandum record of notes given and received.

**2. The Note Payable Journal and Cash.** — If a note payable is made for cash, no account need be entered on the debit side of the cash journal opposite the entry of the amount of cash received. The memorandum and folio space should, however, refer to the original entry in the Note Payable Journal. The folio of the Note Payable Journal should refer to the cash journal page where the amount of cash is entered.

**3. Note Accounts as Controlling Accounts.** — If a business used notes and expected that many installments should be paid on a note without renewing it, a notes receivable or payable account would not be sufficient. It would be desirable to carry a subsidiary account with each of such notes just as the debt would be treated in an open account.

## QUESTIONS AND PROBLEMS

1. Make the following entries in the bill book, which is to be used as a journal both for notes receivable and for notes payable. Accounts payable and accounts receivable are to be provided for as controlling accounts.

1919

- July 1 The Valley Furniture Store draws a 30-day draft on John Smith for \$250 00 covering a shipment of goods. Smith accepts the draft as payable at the Valley National Bank. The draft draws interest from maturity at 8%<sub>0</sub>. The note is discounted at once at the bank at 6%<sub>0</sub>.
- 2 The firm gives to Fielding Co. for merchandise purchases on account a note of \$500 00 payable 60 days after date at the Valley National Bank, with interest at 8%<sub>0</sub>.
- 3 John Smith pays his account of \$300 00 with a 90-day note endorsed by John Doe, and payable at the Central National Bank, Centre, Ill., with interest at 8%<sub>0</sub>.
- 4 The firm accepts in settlement of its account a 60-day draft of the Sample Furniture Co., dated July 1, making it payable at the Valley National Bank.
- 5 The firm discounts at 6%<sub>0</sub> at the Valley National Bank its 90-day note for \$400 00, endorsed by John Smith.
- 6 The firm settles with the Grand Rapids Furniture Co. for its overdue account by giving its note for \$300 00, due in 60 days at the Valley National Bank, with interest at 6%<sub>0</sub>.
- 7 The firm receives from John Ray in settlement of his account a note for \$125 00 dated July 5, endorsed by William Kaid, and payable at the Valley Grove National Bank, Valley Grove, Mass., with interest at 8%<sub>0</sub>.
- 8 John Weaver buys merchandise to the amount of \$500 00, giving his personal note for 60 days at 8%<sub>0</sub>, payable at the Valley National Bank. The firm immediately discounts the note at the bank at 6%<sub>0</sub>.
- 9 The firm receives of J. C. Jackson his 30-day note for \$300 00, dated July 5, payable at the Johnson City State Bank, Johnson City, Pa., with interest at 6%<sub>0</sub>, in full settlement of his account.
- 10 Post the entries to date, and close the bill journal.

2 State how the transactions in Problem 1 would have been treated both in the original entries and in the ledger if the bill book had been used simply as a memorandum book and not as a subsidiary journal.

## CHAPTER XVII

### TRANSACTIONS FOR FEBRUARY

**1. Materials Required for the February Transactions.** — The following kinds of paper will be required for the February transactions

- a About eight sheets of columnar journal paper, pp 1-16
- b About six sheets of columnar journal paper, pp 1-12
- c One sheet of register paper for purchase register, pp 1-2
- d A second sheet of register paper for returns and allowances on purchases, pp 1-2
- e One sheet of register paper for a sales register, pp 1-2
- f A second sheet of register paper for returns and allowances on sales, pp 1-2

**2. Ledger for New Set.** — The ledger will be divided into the following ledgers general ledger, purchase ledger, and sales ledger The accounts and pages for the general ledger (February accounts) are as follows

	Assets	Leger page
<b>1</b>	<b>Current Assets</b>	
	a Cash (see Cash Journal)	
	Petty Cash	1
	b Notes Receivable	1
	(1) Notes Receivable Disc (deduction)	2
	c Accounts Receivable	2
	(1) Reserve for Bad Debts	3
	d Merchandise Inventory—Carpets	3
	e Merchandise Inventory — Furniture	4
	f Scrap	4
	g Accrued Accounts Receivable	5
<b>2</b>	<b>Working Assets</b>	
	a Insurance Unexpired	5
	b Supplies Inventory	6
<b>3</b>	<b>Fixed Assets</b>	
	a Land	6
	b Buildings	8
	(1) Depreciation Reserve for Buildings	8
	c Delivery Equipment	9
	(1) Depreciation Reserve for Del Equipment	9

*A Assets — Continued*

d	Furniture and Fixtures — Administration	10
	(1) Depreciation Reserve for Furniture and Fixtures — Administration	10
e	Furniture and Fixtures — Selling	11
	(1) Depreciation Reserve for Furniture and Fixtures — Selling	11

*B Liabilities*

1	Current Liabilities	
	a Notes Payable	12
	b Accounts Payable	12
	c Accrued Accounts Payable	13
2	Deferred Income	13
3	Proprietorship	
	a Frank Williams, Capital	13
	b Frank Williams, Personal	14
	c Walter Day, Capital	14
	d Walter Day, Personal	15

*C Revenue Accounts*

1	Income Accounts	
	a Furniture Sales	17
	(1) Returns and Allowances on Furniture Sales	18
	b Carpet Sales	18
	(1) Returns and Allowances on Carpet Sales	19
	c Other Income	
	(1) Discount on Purchases	19
	(2) Interest Earned	20
2	Expense Accounts	
	a Furniture Purchases	21
	(1) Returns and Allowances — Furniture Pur	21
	b Carpet Purchases	22
	(1) Returns and Allowances — Carpct Pur	22
	c Freight In	23
	d Administrative Expenses	
	(1) Administrative Salaries	23
	(2) Depreciation of Furniture and Fixtures — Administration	24
	(3) Administrative Miscellaneous	24
	e Selling Expense	
	(1) Freight Out	25
	(2) Advertising	25
	(3) Sales Salaries	26



*C Revenue Accounts — Continued*

(4) Depreciation of Furniture and Fixtures —	
Selling	26
(5) Miscellaneous Selling Expense	27
<sup>1</sup> (6) Losses from Bad Debts	27
(7) Collections and Exchange	27
f Delivery Expense	
(1) Operation of Auto Truck	28
(2) Operation of Wagon Truck	28
(3) Depreciation on Delivery Equipment	29
(4) Miscellaneous Delivery Expense	29
g Building Expense	
(1) Depreciation of Building	30
(2) Repairs of Building	30
(3) Heat and Light	31
h Deductions from Income	
(1) Interest Expense	31
(2) Discount on Sales	32
g General Expense	
(1) Expired Insurance	33
(2) Losses from Sale of Fixed Assets	33
(3) Miscellaneous	33

*D Closing Accounts*

- 1 Trading
- 2 Profit and Loss

An index should be inserted at the beginning of the general ledger and all accounts should be indexed as they are entered.

The purchase ledger, which follows the general ledger, should contain all the accounts payable arising out of purchases. An index sheet should be inserted at the beginning and three account pages should be inserted and paged consecutively as they are needed.

The sales ledger should be constructed in the same way as the purchase ledger.

**3. New Firm Organized.** — A new firm, Williams and Day, is constituted to take over the business of the Valley Furniture Store owned by Frank Williams. It is agreed that profits and losses are to be shared equally by the partners.

**4. Transfer to the New Firm the Business of the Valley Fur-**

<sup>1</sup> Losses from Bad Debts would be charged against a credit and collection department if there existed such an administrative division.

**niture Store.** — From the Balance Sheet of the Valley Furniture Store as shown by the closing entries for January, or by a post-closing trial balance, make journal entries transferring the business to Williams and Day and make the final closing entries in the ledger of the January books

**5. Make Opening Entries Taking Over Business of Valley Furniture Store.** — Now make the opening entries in the February books required to place on the books the assets and liabilities taken over from the Valley Furniture Store owned formerly by Frank Williams, who is given a capital interest in the new firm equal to the capital shown on the books of the Valley Furniture Store at the close of business January 31.

**6. Taking Over the Business of Walter Day.** — The business of Walter Day is taken over on the basis of the Balance Sheet of January 31 as follows

### WALTER DAY

#### BALANCE SHEET, JANUARY 31, 1914

##### *Assets*

Current Assets		
Cash		1,500 00
Notes Receivable (dated Jan 1, 1914, due Sept 1, 1915, interest 7%)		500 00
Accounts Receivable		
George Carey	700 00	
J Collins	385 00	
Fulton Furniture Co	650 00	
Martindale Furniture Co	1,350 00	
A W Martin	375 00	
Randolph Furniture Co	1,075 00	
K C Riley	<u>150 00</u>	
		4,685 00
Merchandise Inventory		25,000 00
Accrued Accounts Receivable Interest		<u>2 92</u>
		31,687 92
Deferred Expense:		
Insurance (expiring Jan 1, 1917)		200 00
Fixed Assets		
Delivery Equipment		<u>2,000 00</u>
Total Assets		33,887 92

*Liabilities*

## Current Liabilities

## Notes Payable

Page Furniture Co (Note dated Dec 1, 1913, due May 30, 1914, interest 8% payable at maturity )	2,500 00
--	----------

John Smith (dated Nov 1, 1913, due April 30, 1914, interest at 8% payable at maturity )	3,500 00
---	----------

## Accounts Payable

Limbert & Gray Furniture Co	1,800 00
--------------------------------	----------

Tobey Furniture & Carpet Co	1,650 00
--------------------------------	----------

Lacy Lock & Safe Co	200 00
---------------------	--------

Haywood Furniture Co	<u>235 00</u>
----------------------	---------------

	3,885 00
--	----------

## Accrued Accounts Payable

Interest	<u>104 67</u>
----------	---------------

	9,989 67
--	----------

## Proprietorship

Walter Day, Capital	<u>23,808 20</u>
---------------------	------------------

Total Liabilities	<u><u>33,887 92</u></u>
-------------------	-------------------------

**7. Readjusting the Inventories.** — In the February books, the following accounts are to be substituted for the merchandise purchases, the merchandise sales, and the merchandise inventory — furniture purchases, carpet purchases, furniture sales, carpet sales, merchandise inventory — carpets, merchandise inventory — furniture. Of the merchandise turned over by the Valley Furniture Store, \$4,500 is carpets and the remainder is furniture. Of the merchandise turned over by Walter Day, \$10,000 00 worth is carpets and \$15,000 00 furniture.

**8. Petty Cash Book.** — Petty cash is to be entered in a memorandum Petty Cash Book ruled as indicated in Illustration No 13.

**9. Note Journal.** — The book for notes payable and notes receivable will be kept as a journal. The student will rule paper to be used for the journal in accordance with Illustration No. 23 and 23 A.

Feb 1 Williams and Day borrow by discounting the firm's note of \$5,000 00 at 8% for 90 days, at the Valley National Bank Accounts are paid as follows

Check #1, Wilson Carpet Co	2,100 00
Check #2, Haywood Furniture Co	2,000 00
Check #3, Lacy Lock & Safe Co	150 00
Check #4, Sample Furniture Co	37 00
Check #5, Underwood Typewriter Co	102 50
	<hr/> 4,789 50

Discounts were taken as follows

Lacy Lock & Safe Co, 2%

Enter the total of each bill in the Accounts Payable column of the cash book, any discounts in Discounts on Purchases, and the net payments in Bank Withdrawals

The partnership also settles with the contractors, who have built additional storage capacity in anticipation of the partnership, paying \$500 00 cash (check #6) and making a \$500 00 one-year 8% note to A J Hamburg, contractor, the entire cost of the addition being \$1,000 00 (Charge to buildings) The firm also receives bills for additional stock orders in anticipation of the expansion in business One of those bills, bearing the date of January 25, 1914, was for \$1,500 00 of rugs and carpets from the Wilson Carpet Co and provided for a 2% discount for ten days, 30 days net The bill was checked and paid (check #7)

Enter the purchase in the purchase register as invoice No. 1, and in the cash book also referring to purchase register

Feb 2 The firm decides to dispose of some surplus delivery equipment, and buy one automobile truck instead One team and two trucks costing \$1,800 00 are sold for \$1,650 00, and an automobile truck is purchased for \$2,000 00 (check #8) <sup>1</sup>

Bank deposits are made once a day This is the only receipt recorded on February 2 Enter the amount in the General and in the Bank Deposits columns

In order to enforce a plan of making all payments by check and properly checking the cash balance, it was decided to create a petty

<sup>1</sup> A new account, losses from sale of fixed assets, might be opened for this item.

cash fund of \$100 00, and check #9 was issued to the cashier for this amount

One team is kept and it is decided to carry separate accounts, showing the cost of horse food and repairs and upkeep of the automobile truck, naming the accounts "operation of automobile truck" and "operation of wagon truck" The firm buys 10 gallons of gasoline for \$1 50 (petty cash) and corn and hay costing \$20 00 (petty cash) The wagon truck is repaired at a cost of \$15 00 (petty cash) The firm also buys two tons of fuel for \$12 50 (petty cash) The firm carries no separate fuel account, preferring to charge such items to "general expense"

Feb 3 The firm receives cash in payment of accounts as follows

St Luke Hospital	660 00	
(2% discount being taken on \$160 00 of the amount)		
Bagdad University	250 00	
Rice Mfg Co	300 00	
Smith Institute	600 00	
J H Brigham	200 00	[disc on \$235 00]
K C Riley	500 00	
H P Square Business College	195 00	
Foster Hall	55 00	
Randolph Furniture Co	1,075 00	
George Carey	700 00	
K C Riley	150 00	
A W Martin	375 00	

Enter the amount of each bill in Accounts Receivable and the discounts allowed in Discounts on Sales One entry for the total of the net receipts is made in the Bank Deposits column, since all money received on February 3 is deposited at one time

The student is expected to refer to the ledger account to see if discounts are allowed, and may assume that all discounts are taken, unless otherwise stated. In actual operation, the firm would refer to those accounts in making out its monthly statement to customers, but since statements are not made out here, we shall assume the firm to receive the cash over the counter or in each case to figure the allowable discounts from its ledger accounts For these transactions the student may further assume that the customer gets a discount on such amounts as

may be applied on accounts subject to discount even if the payment does not cover all of such an account

Feb 3 W M Day fails in business and his account of \$45 00 is marked off as an absolute loss

The student should charge this to reserve for bad debts. The account is debited for all losses on bad debts

Be sure that the debit and credit items are carried into the proper columns

The cash sales for the last three days of the week were as follows

Carpets	180 00
Furniture	225 00

Less frequent records are made in this business to shorten the routine work. The evidence of receipts from cash sales is supplied in the business by cash register slips, which are filed. The credit sales are evidenced by duplicate sales slips as usual.

The credit sales were as follows

Carpets

#1, Foster Hall	50 00
#2, Smith Institute	85 00
#3, K C Riley	30 00
#4, Randolph Furniture Co	125 00
(2% 10 days, net 30)	

Furniture

#1, Foster Hall	\$30 00
#2, Randolph Furniture Co	150 00
(2% 10 days, net 30)	
#5, Martindale Furniture Co	75 00
(2% 10 days, net 30)	

Credit sales are entered in the sales register. The total of each sale is placed in the amount column and the amount of carpets and furniture in their respective columns. Notice that in two sales both carpets and furniture are involved

The payroll is made out for a week, the accrued wages for three days of January being, by consent of the partners, charged to the February account. The two partners agree that, since they are to share profits equally, they will draw out equal amounts of \$30 00

per week each as salaries and charge these amounts to the salary account. The new partner, Walter Day, takes a salary for only three days, or \$15 00, so that the salary payment for the week is as follows (check #10)

Frank Williams, Partner	\$30 00
Walter Day, Partner	15 00
H P McCullough, Salesman	25 00
Floyd Jones, Clerk	12 00
R P Ranger, Driver	10 00
J E Smith, Chauffeur	10 00
	<hr/> 5102 00

The above payroll is the regular weekly payroll except that Walter Day's regular salary is \$30 00 per week.

February 5 Bills for goods ordered were approved as follows

Invoice #2, Wilson Carpet Co for rugs and carpets 500 00

Invoice #3 Sample Furniture Co for furniture 2,500 00

(Each bill was 2% 10 days, net 30)

February 8 H R Scott makes a 60-day note bearing 8% for \$428 00 in settlement of his account. The firm makes a sixty-day 8% note in settlement of its account of \$1,800 00, with the Limbert & Gray Furniture Co. The firm pays a bill of \$50 00 to the *Tribune* for advertising (check #11). It also pays a bill from the Capital Garage for \$10 00 for repairs on the automobile (check #12).

K C Riley returns a \$30 00 rug delivered to him Feb 4th. The Randolph Furniture Co.'s allowed a rebate of \$10 00 for damages of its shipment of furniture purchased Feb 4th.

(A sales returns and allowances book is opened on a sheet of the sales register paper. Entries in this book are made just like entries in the sales register. The postings will, of course, be reversed. To distinguish the book from the sales register, the headings are written in red.)

February 9 On account of an increase in stock and additions to building, the firm took out additional fire insurance to the amount of \$25,000 00 for three years, paying a premium of \$360 00 (check #13). The Capital Garage rent for February was paid in advance, the amount being \$10 00. A new extra tire of the same type as the original tires was bought for the automobile from the Capital Garage, the cost being \$18 00. Additional gasoline to the amount of 10 gallons at 15 cents per gallon was purchased from the Capital Garage (check #14 pays all items).

February 10 In order to strengthen the firm's credit with the bank in anticipation of loan requirements, it was decided to borrow \$1,000 00, thus preventing any decrease of deposits at this time, and at the same time preparing to meet the larger total of bills at the end of the month A \$1,000 00 note for 60 days at 8% was made and the firm was credited with the amount less bank discount of 8% (This discount is interest, and not to be confused with discounts on purchases or sales )

The face of the note is entered in the general column On the line next below the interest is entered The journalization of the interest is interest Dr and cash Cr This entry is exactly the opposite of all other entries on the debit side of the cash book To prevent confusion in posting, the entry is made in red ink The net cash proceeds of the note — the face less the interest — are entered in the Bank Deposits column

An order of goods was received from the Haywood Furniture Co , totaling as follows

Invoice #4, Rugs and Carpets	1,000 00
Invoice #4, Furniture	3,500 00
Returns were made as follows	
Rugs and Carpets	50 00
Furniture	25 00

There was also an allowance of \$30 00 for damages to furniture in transit

Returns and allowances are kept both for purchases and sales, one account for returns and allowances on purchases, and one for returns and allowances on sales Open a purchase returns and allowances book similar to the sales returns and allowances

The Sales for the week were as follows

Cash sales		
Carpets		250 00
Furniture		400 00
Credit sales		
#6, Fulton Furniture Co	Carpets and rugs	125 00
	Furniture	175 00
	(2 / 10 days, net / 30)	
#7, J Collins	Rugs	45 00
#8, K C Riley	Furniture	35 00
#9, A W Martin	Furniture	65 00 ,



The firm paid its bills approved February 5 for \$500 00 and \$2,500 00, taking advantage of the discounts (checks 15 and 16)

The weekly payroll was also paid (check #17)

Frank Williams cashed his personal check for \$25 00 from the receipts from sales. A customer, K. C. Riley, also secures \$30 00 in currency from the receipts from sales in exchange for his personal check for the same amount.

February 12 The cashier paid an express bill of \$5 00 from petty cash.

There was also paid from the petty cash fund \$2 00 for typewriter repairs, and \$5 00 for resetting of shoes on the horses.

February 13 The Randolph Furniture Company settles its account of \$265 00, taking the discount.

February 14 The note in favor of the Sample Furniture Co. due on February 14, is paid today by check #18.

Freight on goods received on invoices 1-4 is paid by check #19 to the Valley Central Railroad, \$190 00 (Freight-In).

Walter Day takes from stock a rug costing \$38 00. (Record this transaction in the journal. Walter Day's account is in the general ledger, hence the entry is made in the General column.)

Check #20 for \$25 00, payable to Mrs. Frank Williams, is charged as an advance of salary to Frank Williams.

February 15 A contract is made with the Oakley Elevator Co. for the installation of a freight elevator in the building to cost \$350 00. Payment of \$100 00 is made by check #21 at this time, the balance is to be paid on completion of the work. During the night a thief rifled the safe and secured the amount of the petty cash fund on hand, \$39 00. A check, #22, is made to replace the stolen money in the petty cash fund.

This theft is an unusual, unforeseen loss and should be charged to general expense — miscellaneous.

February 16 Repairs on the safe (General Expense) costing \$25 00 are made by the Lacy Lock and Safe Co. on account. To prevent a recurrence of the theft a burglar alarm system costing \$150 00 is purchased from the Lacy Lock and Safe Co. on account. (Since this is not a purchase of merchandise, it is recorded in the Journal and not in the Purchase Register. Be sure that the items appear in the proper columns.)

The firm joins the Merchants' Mutual Protective Association, paying \$10 00 in advance for watchman's service (check #23).

February 17 A check, #24, for \$25 00, is drawn payable to the Valley Commercial Club as a contribution toward bringing a convention to the city.

Checks in payment of account are received as follows

J Collins, \$75 00

Fulton Furniture Co, \$200 00 to apply on old account

The weekly payroll is paid with check #25 (Remember the advance made on the 14th)

Cash sales for the week.

Furniture	\$350 00
Carpets	285 00

Credit sales

<i>Customer</i>	<i>Furniture</i>	<i>Carpets</i>	<i>Terms</i>
Rice Mfg Co	74 60		2/10, n/30
Smith Institute	51 20	20 00	" "
J H Brigham	34 00	26 00	" "
H P Square Business College	95 00	30 00	" "
H R Scott		73 40	" "
Wm Wood		60 00	" "
A W Martin	23 20	60 60	" "
Randolph Furniture Co	103 00	20 00	" "
K C Riley	37 10		" "
Purchases			
Creditor			
Wilson Carpet Co	60 00	75 00	" "
Lambert & Gray Furniture Co	60 00		" "
Tobey Furniture & Carpet Co	40 00	50 00	" "

February 19 The check of J Collins deposited on the seventeenth is returned dishonored because of insufficient funds Check #26 is drawn in favor of the National Bank to make good the amount and notice of the failure to collect the check is sent to J Collins

A dishonored check is charged back to the account of the person from whom it is received

An order is received from J H Hotchkiss of Ft Green for carpets, \$150 00 Since the firm has no information regarding his credit standing, Mr Hotchkiss agrees to have the goods shipped to him C O D (Collect on Delivery)

When a C O. D. sale is made, the transportation company collects for the goods on delivery and remits the amount. A

collection charge is made for this service C O D. sales are not charged to the persons buying the goods, but to a C O D account, the name of the customer being written in the explanation space When the remittance is received, C O D is credited. The balance in C O D at any time shows the amount outstanding on C O D account

Several items in the account of the Martindale Furniture Co are long overdue They are pressed for payment, but cannot pay cash As a compromise, three notes for \$500 00, \$500 00, and \$350 00 at 30, 60, and 90 days, respectively, without interest are accepted in payment for the overdue items

February 20 A C O D sale of furniture is made, \$76 40, to Henry Perkins of Newton Corners

J H Brigham sends word that in his bill of the 17th, he was overcharged \$4 25 on furniture Investigation shows that he is correct and a credit memorandum for the amount is sent him

This is neither a return sale nor an allowance It is merely the correction of an error In what book should it be entered?

February 21 Feed amounting to \$20 85 is bought from the Central Produce Company (check #26)

Stationery and office supplies amounting to \$34 68 are purchased from the Corner Book Store on account

J Collins, whose check of the 17th was returned dishonored, sends a second check with assurance that it will be honored

February 23 The Fulton Furniture Co sends a check in payment of their account of \$300 00 The Newsome Furniture Co of Hixton offers to buy a bill of goods providing transportation charges to Hixton are paid

As the account seems to be a profitable one, arrangements are made to sell them furniture \$125 00 and carpets \$68 00 f o b Hixton (Free on Board — that is, the vender pays all charges to Hixton) The terms of the sale are regular A check is made out to the Valley Central Railroad for \$11 50 freight charges (Freight-Out) (Check #28)

The remittance for the C O D sale of the 19th is received.

Collection charges of \$0 85 are paid in cash from the petty cash fund

February 24 A storm damages the store building to the extent of \$150 00 and the stock of furniture to the extent of \$100 00 A contract for repairs to the building is let to J R Gross for \$150 00. (No

entry at this time. Why not?) The damages to the stock cannot be repaired

(This stock damage is an expected loss. The value of the merchandise inventory of furniture has been decreased by the amount of damage.)

The remittance for the C O D sale of the 20th is received

The 30-day note of the Martindale Furniture Co. dated the 19th is discounted at the bank at 6% (six per cent) and the proceeds placed to the credit of Williams and Day

To show the contingent liability on a discounted note the face of the note is credited to notes receivable discounted instead of to notes receivable. Interest is debited for the amount of the discount and the bank for the net proceeds. For convenience in auditing, the debt to interest is made in red ink in the General column on the debit side of the cash book.

The weekly payroll is paid with check #29. No deductions are made on account of the holiday.

#### Cash sales

Carpets	\$225 00
Furniture	375 00

#### Credit sales

<i>Customer</i>	<i>Furniture</i>	<i>Carpets</i>	<i>Terms</i>
St. Luke Hospital	\$175 00	\$125 00	
Randolph Furniture Co.	225 00	40 00	2/10, n/30
George Carey	34 00	66 00	
A. W. Martin	70 00	80 00	
A. M. Mastin	80 00		
K. C. Riley	85 00	65 00	2/10, n/30
Hotel Bismarck	125 00	75 00	

#### Purchases

##### *Creditor*

Tobey Furniture & Carpet Co.	225 00	160 00	2/10, n/30
Wilson Carpet Co.		70 00	" "
Haywood Furniture Co.	125 00		" "

The Western Union collects a bill of \$15.50, which is paid from petty cash.

February 26. The bookkeeper discovers that the sale charged to A. W. Martin on the 17th should have been charged to A. M. Mastin.

Interest on a note, the personal property of Frank Williams, is collected and deposited with the funds of the firm Amount \$25 00

A bill of the Central Garage for \$36 00 is paid with check #30 \$16 00 of this amount is for supplies for the truck and \$20 00 for repairs to Walter Day's car

The elevator installation is completed A check (#31) is sent the Oakley Elevator Co for the amount due them

The 60-day note of the Martindale Furniture Co is discounted at the bank at 6%

A bill of carpets, \$70 00, and furniture, \$123 50, is sold to the Newsome Furniture Co, f o b Hixton, the terms regular

February 27 Customers pay their accounts as follows

Randolph Furniture Co	\$123 00
(Discount taken whenever possible)	
Rice Mfg Co	74 60
W Wood	115 00 (Discount on \$60 00)
K C Riley	72 10 (Discount on \$37 10)

February 28 The repairs on the store building are completed and a check (#32) is given J R Gross in payment for the contract price

A check (#33) is given the Valley Central Railroad in payment of freight bills \$9 60 is for freight on the Newsome Furniture Co shipment of the 25th and \$24 68 for freight on goods received

Walter Day takes from stock a table costing \$17 50<sup>1</sup>

Apply payments on earliest bills unless otherwise directed

A C O D sale of carpets, \$42 35, is made to Peter Wilson of Pine Grove

The bookkeeper reports petty cash expenditures as follows

Express (Freight-In)	\$5 00
Collection and Exchange	85
General Expense	30 00
Operation of Horse Truck	40 00
Operation of Auto Truck	1 50
	<u>\$77 35</u>

He is given a check (#34) to reimburse the fund for these payments Payments on account as follows (Take discount whenever possible)

Tobey Furniture Co	\$90 00 (#35)
Limbert & Gray Furniture Co	60 00 (#36)
Wilson Carpet Co	75 00 (#37)
Haywood Furniture Co	2,000 00 (#38)
Lacy Lock & Safe Co	225 00 (#39)

<sup>1</sup> Charge Walter Day, personal, and credit furniture purchases.

A cash customer is refunded \$3 30 (check #40) for a rug returned (enter in cash book)

A carpet is returned to the Tobey Furniture & Carpet Co for credit \$32 50 Claim against the Haywood Furniture Co for damages of \$8 75 in recent furniture shipment is allowed and credit memorandum received

K C Riley is allowed \$6 00 for imperfections in furniture delivered  
George Carey returns a rug for credit, \$24 00

### POST TRIAL BALANCE CLOSINGS

1. Directions for closing the February Books
  - a. Defer the interest paid in advance, and insurance
  - b. Depreciate the delivery equipment by allowing 2 per cent for the month
  - c. Other depreciation charges for the month are  
Building,  $1\frac{1}{2}$  of 1 per cent, store and office fixtures, 2 per cent
  - d. Make the necessary entries to place on the books interest accrued on both notes receivable and notes payable as shown by the notes in the note journal
  - e. The bill for \$150 00 for building repairs paid to J R Gross on Feb 28 should be distributed over 12 months, beginning with February. An account of repairs on building is opened. Make necessary entries
  - f. In order to allow for the accrued wages, it is necessary to allow \$58 50 (\$5 00 operation of auto truck, \$5 00 wagon, \$48 50 salary) for this item
2. Close the returned sales and allowances and the purchase returns and allowances and other appropriate accounts in the trading account
3. Close the trading into the profit and loss
4. Close all accounts going to profit and loss into this account and close this account into the capital accounts
5. Close any personal accounts into the appropriate capital accounts
6. Make a balance sheet according to Illustration No. 21.

7. Make a Revenue Statement in the form indicated in Illustration No 16

Inventories at end of period.

Furniture Inventory	\$37,422 10
Carpets Inventory	16,286.07

## CHAPTER XVIII

### CLOSING THE BOOKS FOR PERIODICAL REPORTS

**1. The Use and Limitations of the Trading Account.** — Purchases, sales, sales returns and allowances, purchase returns and allowances, freight-in, merchandise inventory at the beginning of the period and merchandise inventory at the end of the period can all be closed into the trading account by means of two compound journal entries. The current textbooks are giving preference to a style of closing which avoids the use of the trading account. It seems worth while to make an analysis of the comparative efficiency of the trading account method and that more commonly recommended both as an example of accounting analysis and for the practical results to be had from the analysis. Let us make the closing journal entries for the trial balance on the next page as they affect the trading account and see what the substitute would be in case the generally preferred method were employed.



## A P LINDSEY

## TRIAL BALANCE, DECEMBER 31, 1920

Cash	590 21	
Notes Receivable	560 75	
Accounts Receivable	8,275 46	
Merchandise Inventory, January 1, 1920	4,075 20	
Furniture and Fixtures	3,215 80	
Buildings	0,000 00	
Land	3,000 00	
Notes Payable		2,102 67
Accounts Payable		5,460 75
A P Lindsey, Capital		20,000 00
A P Lindsey, Personal	1,701 00	
Sales		45,102 75
Sales Returns and Allowances	2,103 60	
Purchases	30,100 40	
Purchases Returns and Allowances		2,970 80
Inward Freight and Drayage	3,841 30	
Salaries	3,500 67	
Advertising	1,140 75	
Insurance	316 00	
Light and Fuel	750 00	
Office Supplies	250 30	
General Expenses	1,500 55	
Royalties		100 00
Discounts on Purchases		830 00
Interest Expense	225 80	
Discounts on Sales	1,240 00	
	<u>76 656 97</u>	<u>76 656 97</u>

## ADJUSTMENT DATA, DECEMBER 31, 1920

Merchandise Inventory	5,190 34
Office Supplies Inventory	50 30
Salaries Accrued and Unpaid	100 00
Advertising Paid in Advance	215 25
Unexpired Insurance	75 40
Interest Accrued on Notes Receivable	40 59
Royalties Received in Advance	25 00
Bad Debts, 2% of Accounts Receivable	
Depreciation	
Buildings, 1%	
Furniture and Fixtures, 10%	

**2. Directions.** — Set up the accounts on ledger paper, making provision for valuation accounts. Next, make on a sheet of journal paper the necessary adjusting and closing entries, and post to the ledger accounts. Finally, make up in proper form a balance sheet and profit and loss statement.

JOURNAL CLOSINGS FOR THE TRADING ACCOUNT

1	Trading	60,500 00	
	Merchandise Inventory Jan. 1, 1920		9,000 00
	Sales Returns and Allowances		2,500 00
	Purchases		48,000 00
	Inward Freight and Drayage		1,000 00
2	Merchandise Inventory -- end of period	16,211 50	
	Sales	63,100 00	
	Purchase Returns and Allowances	3,000 00	
	Trading		82,311 50
3	Trading -- Gross profit	21,811 50	
	Profit and Loss -- Gross profit		21,811 50

The form of closing which is more generally recommended for the accounts concerned would require the following journal entries:

1	Purchases	10,000 00	
	Merchandise Inventory -- First of period		9,000 00
	Inward Freight and Drayage		1,000 00
2	Merchandise Inventory -- End of Period	16,211 50	
	Purchase Returns and Allowances	3,000 00	
	Purchases		19,211 50
3	Sales	41,288 50	
	Purchases -- Cost of Sales		38,788 50
	Sales Returns and Allowances		2,500 00
4	Sales -- Gross Profits	21,811 50	
	Profit and Loss -- Gross Profits		21,811 50

In the journal entries above a compound entry was made when it was feasible to do so. In all cases where a compound entry was made and the total of the items was debited or cred-

ited to one of the closing accounts, the posting to the closing account is made in detail instead of in total, as might be supposed from the appearance of the journal entry. There is one more journal entry pair involved when the sales account is substituted for the trading account, but the substitution is generally preferred mainly on the ground that the balances of the accounts would be ready for use in making the revenue statement. The *cost of sales* represents the item which the sales account method of closing furnishes that must be separately calculated when the closing is made through the trading account. Of course the regular form of the revenue statement requires the use of the items involved in calculating the cost of sales so that no more work is involved in the added calculations made in the *purchases* account when it is closed into sales. In fact the trading account serves the purpose of grouping more items which are taken from the accounts in making the revenue statement. In making the revenue statement all the items above the gross profit item can be taken from the trading account. Otherwise it is necessary to refer to the purchases and the sales accounts for these items. There is possibly a slight economy involved here in the use of the trading account although the number of journal items is the same in each of the two methods, and one more account must be ruled when the trading account is employed.

There is doubtless a feeling on the part of some that the analysis involved in closing through the sales account is more readily grasped by a beginning student than the analysis which is necessary in explanation of the trading account. This may be true for an accounting program which eliminates the merchandise account, but it is not true in the case of students who have already learned the merchandise account. At any rate the trading account analysis is not difficult for a college student and its frequent use would justify teaching it even if it were not as serviceable as the sales account in the computation of gross profits.

**3. The Closing Accounts.** — When the closing is made through the trading account, the closing account will be as follows:

## TRADING

Mdse Inv Jan 1, 1920	9,000 00	Sales	63,100 00
Purchases	48,000 00	Purchases Ret and	
Sales Ret and Allow	2,500 00	Allow	3,000 00
Inw Frt and Drayage	1 000 00	Mdse Inv Dec 31,	
Gross Profits	<u>21,811 50</u>	1920	<u>16,211 50</u>
	82,311 50		82,311 50

When the closing is made through purchases and sales accounts, the two closing accounts will appear as follows

## PURCHASES

Purchases	48,000 00	Purchase Returns	
Mdse Inv Jan 1, 1920	9,000 00	and Allowances	3 000 00
Inward Frt and Dray	1,000 00	Mdse Inv Dec 31,	
		1920	16,211 50
		Cost of sales	38 788 50
	58,000 00		58,000 00

## SALES

Cost of sales	38,788 50	Sales	63,100 00
Sales Ret and Allow	2,500 00		
Gross profits	<u>21,811 50</u>		
	63,100 00		63,100 00

The frequency of the use of the sales account in closing as a substitute for the trading account makes it necessary for the student to become acquainted with the procedure involved in such cases. There is not a great deal of difference in the time required in the use of the sales and trading accounts for closing purposes, and little can be said in favor of one of these plans as against the other.

## QUESTIONS AND PROBLEMS

- 1 Explain the procedure involved when purchases and sales accounts are used instead of trading

2 Make the journal entries for closing through purchases and sales for the trial balances at the end of Chapter XV

3 (a) How many additional original entries are required over those needed in the case of the use of the trading account?

(b) How many additional postings?

(c) How much additional ruling?

4 State the comparative advantages and disadvantages in the two methods of closing

5 Make the adjusting entries, a profit and loss account, and a revenue statement and balance sheet from the trial balance given in this chapter, making use of the sales account instead of the trading account

## CHAPTER XIX

### CONSIGNMENTS

**1. Business of a Consignee.** — Instead of purchasing all, or sometimes even part, of his stock in trade, a merchant frequently acts as the agent of another in the sale of certain goods, charging a commission for his services. Where such an arrangement obtains, the goods are said to be sold on consignment, the owner being spoken of as the consignor and the merchant as the consignee. As owner, the consignor is responsible, not only for the transportation charges, but for such other expenses as may be incurred in connection with the sale of the goods consigned. As agent, the consignee must dispose of the shipment in accordance with the terms laid down by the consignor.

**2. Consignee Records.** — Since neither the assets nor the liabilities of the consignee are affected by the mere arrival of a consignment, no journal entry is made at the time the goods are received. A memorandum record is necessary, however, to show the nature and amount of the consignment and the terms on which it is to be sold. This memorandum record may be conveniently entered on the stub of an account sales blank, as indicated in Illustration No. 25 below. To facilitate the journal entries to be later made on the books of original record, each consignment should be given a specific number at the time it is received.

In recording sales of consignment goods, two possible methods present themselves. Under the first method both the cash and the credit sales may be entered in the regular sales journal or register, which is provided with a special column for the purpose, or only the credit sales may be recorded in the sales journal, the cash sales being entered in the cash book and posted to the credit of the respective consignment accounts. The regular account space of the sales register



serves for the entry of the accounts to be debited in connection with the various consignment sales, the consignments to be credited being indicated in a column to the right of the column for consignment sales. In other words, there is no posting of the total of the consignment sales column. The debits for the various items of the column are cash and individual accounts receivable, the corresponding credits being the respective consignment accounts. The illustration on the opposite page gives the correct form of the sales register above described.

There is an alternative which would eliminate the consignment sales from the sales journal, the time sales being entered in the general journal and the cash sales in the cash journal. This method is used in Illustration No. 26.

Expenses incurred by the consignee in connection with consignment goods are credited to cash or accounts payable and debited to the consignment accounts to which they pertain. The consignee's commission is, of course, also charged to each consignment account and credited to an income account of commission earned, which, when the books are closed at the end of a particular period, is closed into profit and loss along with the other revenue items. The balance of the consignment account manifestly represents the amount due to the consignor, and is ordinarily paid in cash at the time the accounting to the consignor is made.

Since the commission account represents the total income of the consignee on consignment goods and the sundry expenses are charged to the consignor, there is little occasion for creating controlling accounts in connection with recording consignment data on the books of the consignee. There would be practically no managerial significance to the collection in one total of all the charges made in connection with consignment accounts, inasmuch as these charges affect the income of no one but the consignor. The purpose of the consignment accounts is simply to furnish a record from which there may be made to the consignor a statement of the gross receipts from consignment sales, the charges incurred in connection therewith, the agent's commission, and the balance due to the consignor by the consignee.



As an illustration, let us suppose that John King on January 1, 1919, consigns to H P Woodrow, of Center, Ill., fifty barrels of apples to be sold at \$5 00 a barrel, Woodrow to receive ten per cent commission for his services. The following expenses are incurred by Woodrow in connection with the consignment: freight, \$20 00, drayage, \$5 00. On January 15, 1919, Woodrow renders to King on account sales with check for forty-nine barrels of apples, one barrel having spoiled after being received. The journal entries required to record on Woodrow's books the various transactions involved are as follows:

## JANUARY 1

Consignment No 1 (J R King) — Freight	20 00	
Consignment No 1 (J R King) — Drayage	5 00	
Cash		25 00

Charges incurred in receipt of 50 barrels of apples  
from John King to be sold on consignment

Cash	245 00	
Consignment #1 — Sales		245 00
Goods sold on consignment		

## JANUARY 15

Consignment No 1 — Commission	24 50	
Commissions — Consignment #1		24 50
Commission earned on Consignment #1		
Consignment #1 — Balance Due Consignor	195 50	
Cash		195 50

Payment of balance due on consignment

After these journal entries are posted to the general ledger, the consignment account will appear as follows:

## CONSIGNMENT NO 1 — J R KING, CONSIGNOR

1919			1919		
Jan 1	Freight	20 00	Jan 15	Sales	245 00
	Drayage	5 00			
15	Commission	24 50			
	Balance Due				
	Consignor	195 50			
		<u>245 00</u>			<u>245 00</u>

Instead of sending a check with the account sales for the balance due to the consignor, Woodrow might have credited King with the amount due. The consignment account would then have been closed with the following journal entry

Consignment #1 — Balance Due Consignor	195 50
Account Payable	
(John King)	195 50
Credit to King of balance due on consignment	

An account sales is simply a summarized statement of a particular consignment account, showing the consignment sales, the expenses incurred, the commission earned, and the balance due to the consignor. As the account sales is usually made from the ledger record, the consignment account should show in the memorandum space the data set forth above.

**3. Information Required by the Consignor.** — Although there is no change of ownership when the consignor ships goods to the consignee to be disposed of on a commission basis, it is desirable for the consignor to know the results of his consignment business not only as regards individual consignees but also as regards the consignment business as a whole. He must be in position to determine whether the business should be expanded or contracted, and which of a number of consignees should be encouraged or eliminated. The records commonly kept show the results so far as individual consignees are concerned, but are deficient in supplying information with reference to the business as a whole. This latter information may be gained through controlling accounts, with a reduction rather than an increase in the labor ordinarily involved.

**4. Consignee Record of Shipments.** — When goods are sent to a consignee, an account is set up by the consignor with the consignment in question, which for purposes of convenience is designated by number. The account is debited with the cost of the goods shipped, the purchases account being credited for a like amount. Thus the initial step is taken for setting up a separate profit and loss account, which is later closed into the regular profit and loss. By means of controlling accounts, these

## ILLUSTRATION NO 25

## ACCOUNT SALES

No _____	
Account Sales for Consignment No <u>1</u> from <u>J R King</u> Address <u>Valley, Ill</u>	
Mdse Received	<u>50 barrels of apples</u>
Terms of Sale	<u>\$5 00 per barrel</u>
Commission	<u>10%</u>
Account Sales Rendered	<u>January 15, 1919</u>
Amount Sold	<u>40 barrels</u>
Deductions	<u>1 barrel spoiled on arrival</u>
Balance Unsold Carried Forward to Account Sales No _____	
See also Account Sales _____	
H P WOODROW, Center, Ill, Jan 15, 1919 Account Sales for Consignment No <u>1</u> from <u>J R King</u> Address <u>Valley, Ill</u>	
Date	Description
1919	
Jan 15	Sales for half month
	Freight
	Drayage
	Commission
	<div style="display: flex; justify-content: space-between;"> <span>245 00</span> <span>20 00</span> <span>5 00</span> <span>24 50</span> </div> <div style="display: flex; justify-content: space-between; border-top: 1px solid black;"> <span></span> <span></span> <span>49 50</span> <span>195 50</span> </div>

The stub of each Account Sales should contain a reference to all preceding account sales affecting a given consignment number, as well as a reference to the account sale number to which the balance of any unsold portion of a consignment may be carried

individual shipment profits and losses may be combined into a single shipment profit and loss account, the balance of which would, of course, represent the total of the balances of the various subsidiary shipment accounts

To illustrate the use by the consignor of controlling accounts in connection with consignment shipments, let us consider again the fifty barrels of apples consigned to Woodrow by King, supposing this time that the apples cost \$150 00 and that the freight and drayage are paid by the owner. The cost of the shipment and the expenses incurred are set up on King's books by the following journal entries, which contain a debit first to the controlling account and second to the subsidiary account, written in parentheses underneath

JANUARY 1, 1921

Sh P and L — Cost of Goods Shipped	150 00	
(Shipment No 1, — H P Woodrow, Center, Ill ) <sup>1</sup>		
Purchases		150 00
Shipment of 50 bbls of apples to H P Woodrow to be sold at \$5 00 a barrel on 10% commission		
Sh P and L — Shipment Charges —		
Freight, \$20 00, drayage, \$5	25 00	
(Shipment No 1)		
Cash		25 00
Payment of shipment charges ad- vanced by Valley Warehouse		

If the shipment charges had been credit transactions, the second entry would have been as follows

Sh P and L — Shipment Charges —		
Freight, \$20 00, drayage, \$5 00	25 00	
(Shipment No 1)		
Accounts Payable		25 00
(Valley Warehouse)		
Credit to warehouse of shipment charges advanced		

<sup>1</sup> The parenthesis memorandum indicates in each case the subsidiary account debited or credited

The journal entries connected with consignment shipments are most advantageously handled through a shipment journal, such as is shown in Illustration No 26, below. Such a journal provides for all the data involved, except shipment charges which are paid in cash. These must be entered on the credit side of the cash journal, a special controlling account column being added for these items, as indicated in the cash journal illustrated below.

**5. Recording the Data from the Account Sales.** — Upon receipt of an account sales from the consignee, the consignor enters on his journal or cash record the amount of the proceeds of the shipment, the account sales constituting the only record kept by the consignor of the consignee's commission and expenses. A controlling account may thus be opened with *shipment profit and loss*. If shipment proceeds are always received in cash as each account sales is made, a column on the debit side of the cash journal headed *Shipment Profit and Loss — Shipment Proceeds* will fully provide for the entry of the data received from the consignee. In the case of the shipment used for illustration, the receipt of Woodrow's check is recorded on King's books by the following journal entry:

JANUARY 15, 1921

Cash	195 50	
Sh P and L — Shipment Proceeds		195 50
(Shipment No 1)		
Proceeds of sale of 50 bbls apples con-		
signed to H P Woodrow, Center, Ill		

The entry in this instance would be made on the debit side of the cash journal, in the column headed *Shipment Profit and Loss — Shipment Proceeds*, opposite the subsidiary account of *Shipment No 1*, and extended into the *Bank Deposit* column, following the illustration given below.

Frequently, periodic settlements are made by the consignee covering a number of shipments, the shipment proceeds being during the interim credited to the consignor by the consignee. Cases of this kind can be readily provided for by placing a Ship-

ment Profit and Loss—Shipment Proceeds column in the general journal, as shown below. For example, had the account sales covering our apple shipment not been accompanied by cash, the shipment proceeds would have been entered by King in his general journal in the following manner:

Accounts Receivable	195 50
(H P Woodrow)	
Sh P and L — Shipment Proceeds	195 50
(Shipment No 1)	
Proceeds of Shipment No 1 due from Woodrow, consignee	

The exact form in which the entry is made is indicated in the illustration given below

If shipment No 2 to H P Woodrow by King be 100 barrels of apples costing \$3 50 per barrel to be sold at \$5 00 per barrel on a 10% commission, the entries on King's books would be as follows

Sh P and L -- Cost of Goods Shipped	350 00
(Shipment No 2)	
Purchases	350 00

If there were charges paid on the shipment for freight-out amounting to \$4 50 the entry would be

Sh P and L — Charges (freight)	4 50
(Shipment No 2)	
Cash	4 50

Let us suppose further that Woodrow sends his account sales as follows

JANUARY 20, 1921

100 bbls of apples at \$5 00 per bbl		\$500 00
Drayage	2 75	
Commission	<u>50 00</u>	<u>52 75</u>
Balance due (cash inclosed)		\$447 25

King would make the following entry:

JANUARY 20, 1921

Cash	447 25	
Sh P and L — Sh Proceeds		447 25
(Shipment No. 2)		

**6. Closing of the Consignment Books.** — In the closing of the consignment books, the subsidiary accounts are provided for through the posting of the detailed entries in the various journals. The controlling accounts, however, are debited and credited by means of closing entries of a character similar to those of the following illustration. A final general journal entry closes the shipment profit and loss into the regular profit and loss for the period under view.

The controlling account for the two shipments would be as follows

SHIPMENT PROFIT AND LOSS

Cost of Goods Shipped	500 00	Shipment Proceeds	642 75
Shipment Charges	20 50		
	520 50		
Net Profits	<u>113 25</u>		
	642 75		642 75

The two subsidiary accounts would appear in the subsidiary shipment ledger as follows

SHIPMENT No. 1 — H. P. WOODROW, Center, Ill.

Jan 1	150 00	Jan 15	105 50
1	25 00		
	175 00		
15 Net Profit	<u>20 50</u>		
	105 50		105 50

SHIPMENT No. 2 — H. P. WOODROW, Center, Ill.

Jan 5	350 00	Jan 20	447 25
5	4 50		
	354 50		
20 Net profit	<u>92 75</u>		
	447 25		447 25

The shipment profit and loss controlling account serves the purpose of showing to King, the consignor, what the total profits on his shipment business are and the detail shipment ac-

counts serve the purpose of showing to King the amount of the net profits on each consignment. It will be noted that the sum of the net profit balances shown by the subsidiary accounts equals the net profit balance shown by the controlling account. There is an inventory to be entered in those cases where the account sale is rendered before all the goods shipped have been sold. The ledger accounts of Illustration No. 26 show how the inventory is entered.

**7. Inventory of Goods Shipped** — At the periodic closings, along with the regular merchandise inventory, account must be taken of the consignment goods still unsold by the consignees. As it is not always convenient to wait for a statement from them of the goods on hand, the consignment goods inventory is usually calculated by means of the accounts sales. To make this calculation possible, there is entered in red, in both the cash journal and the general journal in the column to the right of the column for shipment proceeds along with the entry of the account sales data, the cost of the goods sold, the red-ink entries simply indicating that these figures are not to be added with the black-ink entries to be found in the same column. The total of these red-ink entries represents the cost of the goods sold during the period under consideration, and, when subtracted from the cost of the total goods shipped, discloses the cost of the goods still on hand, or the inventory of consignment goods. This inventory is then credited to the shipment profit and loss before the latter account is closed into the general profit and loss, and debited to a new account of inventory of goods shipped or simply brought down as the debit balance of the cost of goods shipped account for the succeeding period, the necessary memorandum entry being made to show the nature of the beginning charge. It would also be advantageous to carry in the memorandum columns of the shipment ledger the cost figures of goods sold when the credit for shipment sales is made from the account sales to the subsidiary shipment account. The account would then show data for calculating the merchandise inventory credit to be used in the subsidiary account.



**8. Illustration.** — The illustration given below gives in definite form the treatment of consignment transactions in accordance with the principles discussed above

### CONSIGNMENT TRANSACTION FOR ILLUSTRATION NO 26

**I Organization of the Valley Book Store** — The Valley Book Store is organized to do a wholesale business in books. It plans to sell books on consignment and also to sell goods consigned to it.

It organizes with a capital of \$50,000 00 and takes over the business of K. C. Johns on the following statement of assets and liabilities:

#### BALANCE SHEET OF K. C. JOHNS

JUNE 30, 1919

<i>Assets</i>		<i>Liabilities</i>	
Cash	1,000 00	Accounts Payable	5,000 00
Books	10,000 00	Capital	13,000 00
Stationery	5,000 00		
Furniture and Fixtures	2,000 00		
	<u>18,000 00</u>		<u>18,000 00</u>

The Valley Book Store allows \$3,000 00 to K. C. Johns for goodwill, and takes over his business, assuming his liabilities. Randolph Jones contributes \$30,000 00 of the capital and K. C. Johns, \$20,000 00. Profits and losses are to be shared according to capital.

**II Keeping the Laboratory Books** — No detail customer and creditor accounts will be kept except in connection with consignment transactions. The consignment business will be confined to books.

**III. Transactions for July, 1919** —

July 1 (M) The business buys on credit goods as follows:

Books	\$5,000 00	Stationery	\$2,000 00
-------	------------	------------	------------

July 2 (T) It receives \$3,125 00 of books on consignment from McClure's New Book Store, Chicago, Ill., as follows:

300 Jones' Laws of Contracts to be sold at \$5 00	\$2,500 00
250 Hortcut's Business Law to be sold at \$2 50	625 00
	<u>\$3,125 00</u>

The books are to be sold on a commission of 10 per cent and settlement is to be made at the end of each week. The freight and cartage-in were \$50.00; telephone and telegraph, \$1 50.

July 3 (W) The Company ships 350 copies of Willis on Sales which cost \$5 00 per copy to the Wisconsin Corporation Book Store, Cedar Grove, Wis, to be sold at \$7 50 per copy, commission 10 per cent

July 4 (T) The Company pays \$2 00 for cartage and receives a bill from the Valley Central Railroad for freight on this shipment, \$30 00

July 6 (F) The Company pays its weekly payroll as follows

R C Criswell, Manager	\$ 50 00
T J Caft, Salesman	30 00
R M Paine, Bookkeeper	35 00
G M Ross, Shipping Clerk	25 00
K R Kenedy, Stenographer	20 00
R B Klette, Traveling Salesman	35 00
B C Kohler, Traveling Salesman	35 00
L R Trailer, Traveling Salesman	30 00
	<u>\$260 00</u>

The credit sales for the week were

Books	\$2,000 00
Stationery	1,500 00

The Company received the following account sales from the Wisconsin Book Store, Cedar Grove, Wis

Sales	\$375 00
Cartage	3 00
Damage Discounts	10 00
Commission	<u>37 50</u>
	<u>50 50</u>
Balance Due Consignor	\$324 50
(Check inclosed)	

It sends to the McClure's Book Co, Chicago, Ill, the following account sales

75 Jones' Laws of Contracts, at 5 00	\$375 00
50 Hortcut's Business Law, at 2 50	<u>125 00</u>
Total Sales	500 00
Freight and Cartage-In	50 00
Telephone and Telegraph	1 50
Commission	<u>37 50</u>
	<u>89 00</u>
Balance Due Consignor	\$411 00
(Check inclosed)	

July 6 Cash Sales for week

Book Sales	\$ 500 00
Stationery Sales	225 00
Paid on accounts payable	1,500 00

July 8 The Company takes out a \$16,000 00 fire insurance three-year policy and pays a premium of \$60 00 to the Renox Fire Insurance Co

July 9 It purchases on time additional stock as follows books, \$2,000 00, stationery, \$1,000 00 The Company decides to buy the building in which it does business from the Valley Trust Co at \$10,000 00 It plans a 6% ten-year mortgage on the building with the Trust Co for \$8 000 00 pays \$1 000 00 in cash and makes a two-year 8% note to the Valley Trust Co for the balance

July 10 The Company ships to the Macon Book Co., Macon, Minn., 300 copies of Johnson on Agency, which cost \$4 00 per copy, to be sold at \$6 50 per copy The goods are shipped over the National Railway, which sends a bill for \$35 00 freight The cartage was \$2 50, which was paid in cash to the Valley Express Co Commission 10%

July 11 The Company lost in a fire stock as follows

Books	\$5,000 00
Stationery	3,000 00

The Insurance Company in this case according to the policy required the insured to bear 25 per cent of the loss The Insurance Company paid in cash the amount due and the book company marked down accordingly the book value of its insurance

July 12 Instead of charging the fire loss to profit and loss the stockholders decided to reduce the capital by the amount of the loss falling on the company, each stockholder bearing the loss in proportion to his capital

July 13 The Company received from the Wisconsin Corporation Book Store the following account sales

100 Williston on Sales, at \$7 50	\$750 00
Commission on Sales	<u>75 00</u>
Due Consignor (check <i>not</i> inclosed)	\$825 00

(If this report were frequently without a check enclosure, how would the journal be ruled?)

The payroll was disbursed as in the preceding week

The Company sends the M. Clure's Book Co. the following account sales

125 Jones' Law of Contracts, at 5 00	\$625 00
100 Hortcut's Business Law, at 2 50	<u>250 00</u>
Total	875 00
Commission	<u>87 50</u>
Due Consignor (check inclosed)	\$962 50

## Credit sales for the week

Books	\$1,800 00
Stationery	900 00
Credit purchases	
Books	5,000 00
Stationery	2,750 00
Cash sales	
Books	750 00
Stationery	500 00
Received on account	3,500 00
Paid on accounts	10,000 00
Discount on sales	50 00
Discount on purchases	125 00

July 20 (Week of July 15-20) (For the remainder of the month the sales and purchases will be given as a total and the details of the consignment sales and the shipments will be given for the week as a whole )

At the end of the week the Company received from the Wisconsin Corporation Book Store the following account sales

100 Williston on Sales, at \$7 50	\$750 00
Refund on Defective Copy	5 00
Commission	75 00
	<u>80 00</u>
Due Consignor (check inclosed)	\$670 00

It sent the following account sales to the McClure's Book Co

150 Jones' Laws of Contracts, at \$5 00	\$750 00
50 Hortcut's Business Law, at \$2 50	<u>125 00</u>
Total	\$875 00
Commission on Sales	<u>87 50</u>
Due Consignor (check inclosed)	\$787 50

The regular payroll was disbursed

Purchases on credit for the week:

Books	\$3,000 00
Stationery	1,750 00
	<u>\$4,750 00</u>
Credit Sales.	
Books	\$3,500 00
Stationery	<u>2,000 00</u>
	\$5,500 00
Paid on account	4,500 00
	(Includes disc of \$75 00)
Received on account	5,000 00
	(Includes disc of \$87 50)

## Cash sales

Books	\$8,000 00
Stationery	550 00

July 27 (Week ending July 27) The Company sent to the McClure's Book Co its weekly account sales as follows

100 Jones' Laws of Contracts, at \$5 00	\$500 00
50 Hortcut's Business Law, at \$2 50	125 00
Total	<u>625 00</u>
Commission	62 50
Due Consignor (check inclosed)	<u>\$562 50</u>

There remained of this consignment only 50 Jones' Law of Contracts

The Macon Book Co sends the following account sales

250 Johnson on Agency, at \$6 50	\$1,625 00
Telephone and telegraph	2 50
Cartage	3 25
Commission	<u>162 50</u>
Due Consignor (check inclosed)	<u>\$1,450 25</u>

Its purchases for the week were

Books	\$4,000 00
Stationery	<u>1,800 00</u>
	\$5,800 00

Its credit sales were

Books	\$5,000 00
Stationery	<u>2,250 00</u>
	\$7,250 00

Cash Sales

Books	\$780 00
Stationery	<u>480 00</u>
	\$1,260 00

Received on account

Less discounts	<u>8,000 00</u>
	1,200 00
	<u>\$6,800 00</u>

Paid on account

Less discounts	<u>1,100 00</u>
	150 00
	<u>\$950 00</u>

It was decided to make the payroll monthly for the future and pay it on Saturday of the first week of the month. The store was closed for inventory on July 31.

Regular payroll was disbursed.

ILLUSTRATION NO 26  
THE BOOKS OF THE CONSIGNOR  
GENERAL JOURNAL

ACCOUNTS PAYABLE	ACCOUNTS RECEIVABLE	GENERAL	L F	JULY 1, 1919	L F	GENERAL	SH P & L — PROCEEDS OF SHIPMENTS	ACCTS PAY Cost of Goods Shipped
				The Valley Book Store is organized by K C Johns and Randolph Jones with a capital of \$50,000, \$30,000 to be paid by Jones and \$20,000 by Johns Johns is to pay \$10,000 of this amount by transferring his old business to the new business				
		2,000 00	278	Furniture and Fixtures				
		10,000 00	277	Books Inventory				
		1,000 00	✓	Cash				
		5,000 00	278	Stationery Inventory				
		3,000 00	279	Goodwill				
				Accounts Payable	279			5,000 00
				K C Johns, Capital	280	10,000 00		
				To bring the assets and liabilities of Johns on the books and credit him therefor				
		21,000 00		Earned Forward		16,000 00		5,000 00

CONSIGNMENTS

GENERAL JOURNAL

ACCOUNTS PAYABLE	ACCOUNTS RECEIVABLE	GENERAL	L F	JULY 1, 1919	L F	GENERAL	SH P & L PROCEEDS OF SHIPMENTS	ACCTS PAY Cost of Goods Shipped
		21,000 00		Brought Forward 6		16,000 00		5,000 00
		37 50	280	Consignment # 1—McClure's Commissions Earned To bring commission earned on books	280	37 50		
		9000 00	278	Buildings Notes Payable Mortgage Payable 2-3 year 8 <sup>7</sup> / <sub>8</sub> % note, 6 <sup>5</sup> / <sub>8</sub> %, 10-year mort- gage on buildings to Valley Trust Co	279 279	1000 00 8000 00		
		30,037 50		Carried Forward		25,037 50		5,000 00



## GENERAL JOURNAL

ACCOUNTS PAYABLE	ACCOUNTS RECEIVABLE	GENERAL	L F	JULY 11, 1919	L F	GENERAL	SH P & L — PROCEEDS OF SHIPMENTS	ACCTS PAY Cost of Goods Shipped
		30,037.50 8,000.00	281	Brought Forward Fire Loss		25,037.50		\$5,000.00
				Books Inventory				
				Stationery Inventory	277	5,000.00		
				Stock damaged by fire	278	3,000.00		
		30.00	283	General Profit and Loss Insurance				
				To mark down book value of in- surance	282	30.00		
		800.00 1,200.00	280 279	K C Johns, Capital Randolph Jones, Capital				
				Fire Loss				
				Proprietors reduce their capital by article of Fire Loss	281	2,000.00		
	675.00			<sup>13</sup> 1 Wisconsin Corporation Book Store Shipment # 1 — W B S	283		675.00	500.00
		87.50	280	Con # 1 — McClure's Commission Earned				
				To record commission earned	280	87.50		
		40,155.00		Carried Forward		35,155.00	675.00	5,000.00
	675.00							500.00

<sup>1</sup> Subsidiary Sales Ledger not kept for this illustration

GENERAL JOURNAL

ACCOUNTS PAYABLE	ACCOUNTS RECEIVABLE	GENERAL	L F	JULY 27, 1919	L F	GENERAL	SH P & L — PROCEEDS OF SHIPMENTS	ACCTS PAY — Cost of Goods Shipped
	675 00	40,155 00		Brought Forward		35,155 00	675 00	5,000 00
		87 50	280	Con # 1 — McClure's Commissions Earned <sup>20</sup>		87 50		500 00
		62 50	280	Con # 1 — McClure's Commissions Earned <sup>27</sup>		62 50		
	675 00	40,305 00		Totals	280	35 305 00	675 00	5,000 00
		675 00	277	Accounts Receivable General				500 00
		40,305 00	V	General		35,305 00		
				Sh P & L — Pro of Shipments	283	675 00		
				Accounts Payable	279	5 000 00		
		40,080 00				40 080 00		
		700 00	278	July 31, 1919 Mdse Inv Shipments				
				Sh P & L — Cost of Goods Shipped	283	500 00		
				(Shp # 1 — W B S)	283			
				Sh P & L — Cost of Goods Shipped	284	200 00		
				(Shp # 2 — M B Co)				
		15 39	277	Deferred Expense				
				Sh P & L — Charges	283	15 39		
				(Shp # 1 — 9 14)	283			
				(Shp # 2 — 6 25)	284			
		715 39		Carned Forward		715 39		

## GENERAL JOURNAL

ACCOUNTS PAYABLE	ACCOUNTS RECEIVABLE	GENERAL	L F	JULY 31, 1919	L F	GENERAL	SH P & L — PROCEEDS OF SHIPMENTS	ACCTS PAY Cost of Goods Shipped
		715 39	283	Brought Forward		715 39		
		815 64	283	Sh P & L — Net Profit				
			283	(Ship # 1) (396 64)				
			284	(Ship # 2) (419 00)				
				General P & L	283	815 64		
				Reversing entry to reopen accounts after closing				
		29 17	277	Deferred Expenses				
				Insurance	282	29 17		
				To defer unexpired insurance				
		55 00	282	Depreciation				
				Depreciation Reserve — Bldgs	278	40 00		
				Depreciation Res — Fur & Fix	278	15 00		
				To bring depreciation for period on books				
		32 67	283	General P & L — Interest				
				Accrued Expenses	279	32 67		
				(Int on Mtge Pay 28 00)				
				(Int on Note Pay 4 67)				
				Carried Forward				
		1,647 87				1,647 87		

GENERAL JOURNAL

ACCOUNTS PAYABLE	ACCOUNTS RECEIVABLE	GENERAL	L F		L F	GENERAL	SH P & L — PROCEEDS OF SHIPMENTS	ACCTS PAY Cost of Goods Shipped
		1,647 87		Brought Forward		1,647 87		
		11,972 00	277	Books Inventory				
				Trading	282	11,972 00		
				To bring Inventory at end of period on books				
		6,257 00	278	Stationery Inventory				
				Trading	282	6,257 00		
				To bring Inventory at end of period on books				
		32,350 00	282	Trading				
				Books Inv	277	5,000 00		
				Stationery Inv	278	2,000 00		
				Books Purchases	281	16,050 00		
				Stationery Purchases	281	9,300 00		
				To close into Trading				
		15,130 00	280	Books Sales				
		8,405 00	280	Stationery Sales				
				Trading	282	23,535 00		
		75,761 87		Carried Forward		75,761 87		

GENERAL JOURNAL

ACCOUNTS PAYABLE	ACCOUNTS RECEIVABLE	GENERAL	L F		L F	GENERAL	SH P & L PROCEEDS OF SHIPMENTS	ACCTS PAY Cost of Goods Shipped
		75,761.87	282	Brought Forward		75,761.87		
		9,414.00		Trading — Gross Profit General P & L	283	9,414.00		
				To close Trading to General P & L				
		780.00	283	General Profit and Loss Salaries	281	780.00		
				To close Salaries to Profit and Loss				
		1,393.33	283	General Profit and Loss Insurance	282			
				Dis on Sales	282	83		
				Depreciation	282	1,337.50		
				To close to P & L		55.00		
		275.00	280	Commissions Earned				
		350.00	281	Disc on Purchases General P & L	283			
				To close to General P. & L		625.00		
		87,074.20		Carry Forward				
						87,074.20		

GENERAL JOURNAL

ACCOUNTS PAYABLE	ACCOUNTS RECEIVABLE	GENERAL	L F		L F	GENERAL	SH P & L — PROCEEDS OF SHIPMENTS	ACCTS PAY Cost of Goods Shipped
		87,974 20 260 00	283	Brought Forward General Profit and Loss Salaries	281	87,974 20 260 00		
		8,358 64	283	General Profit and Loss K C Johns, Capital Randolph Jones, Capital	280 279	3,343 46 5,015 18 96,592 84		







CASH JOURNAL, CR

DATE	ACCOUNT	EXPLANATION	L	F	CK No	GENERAL	ACCOUNTS PAYABLE	DISC ON PUR	SH P & L— CHARGES	BANK WITH- DRAWALS
1920										
July 2	Consignment # 1	McClure's—ctg								
4	Shipment # 1	50—tel 1 50	280		1	51 50				51 50
6	Salaries	Wis Book Store	283		2				2 00	2 00
6	Consignment # 1	Weekly payroll	281		3	260 00				260 00
6	Creditors	McClure's—settle	280		4	411 00				411 00
8	Insurance	On acct	✓		5		3 500 00			3,500 00
9	Buildings	Renov Fire Ins	282		6	60 00				60 00
10	Shipment # 2	Valley Trust Co	278		7	1,000 00				1,000 00
13	Salaries	Macon Book Store	284		8				2 50	2 50
13	Consignment # 1	Payroll for week	281		9	260 00				260 00
13	Creditors	McClure's	280		10	787 50				787 50
20	Consignment # 1	Paid on acct	✓		11		10,000 00	1 25 00		9,875 00
20	Salaries	McClure's	280		12	787 50				787 50
20	Creditors	Payroll for week	281		13	260 00				260 00
27	Consignment # 1	Paid on acct			14		4 500 00	75 00		4,425 00
27	Salaries	McClure's	280		15	562 50				562 50
27	Creditors	Payroll for week	281		16	260 00				260 00
		Paid on acct	✓		17		1,100 00	1 50 00		950 00
						4,700 00	19,100 00	350 00	4 50	23,454 50

[illegible]

## PURCHASE REGISTER

DATE	ACCOUNT	PARTICULARS	L F	ACCOUNTS PAYABLE	BOOKS	STATIONERY
1919 July 1	Creditor	Bought on credit		7,000 00	5,000 00	2,000 00
9	Creditor	Bought on credit		3,000 00	2,000 00	1,000 00
13	Creditor	Bought on credit		7,750 00	5,000 00	2,750 00
20	Creditors	Bought on credit		4,750 00	3,000 00	1,750 00
27	Creditors	Bought on credit		5,800 00	4,000 00	1,800 00
				28,300 00	19,000 00	9,300 00
July 31	Book Purchases		281	19,000 00		
	Stationery Purchases		281	9,300 00		
	Accounts Payable		279		28,300 00	
				28,300 00	28,300 00	

# CONSIGNMENTS

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## SALES REGISTER

DATE	ACCOUNT		S S	L F	ACCOUNTS RECEIVABLE	CASH SALES	BOOKS	STATIONERY L
1919			1		3,500 00		2,000 00	1,500 00
July	Customers	Sold on acct Cash Sales	2			725 00	500 00	225 00
	Customers	Sold on acct Cash Sales	3		2,700 00		1,800 00	900 00
	Customers	Sold on acct Cash Sales	4			1,250 00	750 00	500 00
20	Customers	Sold on acct Cash Sales	5		5,500 00		3,500 00	2,000 00
20	Customers	Sold on acct Cash Sales	6			1 350 00	800 00	550 00
27	Customers	Sold on acct Cash Sales	7		7,250 00		5,000 00	2,250 00
			8			1260 00	780 00	480 00
					18,950 00	4,585 00	15,130 00	8,405 00
July	Accounts Rec			277	18,950 00			
	Cash Sales			✓	4,585 00			
	Book Sales			280		15,130 00		
	Stationery Sales			280		8,405 00		
					23,535 00	23,535 00		

SHIPMENT JOURNAL

DATE	ACCOUNT AND ADDRESS	GOODS CONSIGNED AND ROUTE	SALE PRICE	COMM	L F	SH P & L COST OF GOODS CONSIGNEE	SH P & L CHARGES	L F	ACCOUNTS CREDITED
1919 July									
3	Shipment # 1 — Wisconsin Book Store, Cedar Grove, Wisconsin	350 Willis on Sales	7 50	10 C	283	1,750 00	30 00	283	Valley Cen R R
10	Shipment # 2 — Macon Book Co, Macon, Minn	300 Johnson on Agency, Nat'l Ry	6 50	10 C	284	1,200 00	35 00	284	National R R
31	Sh P & L — Cost of Goods Book Purchases	Consigned			283	2,950 00	65 00		
31	Sh P & L — Charges Accounts Payable				281	2,950 00	2,950 00		
					283	65 00			
					279		65 00		
						3015 00	3015 66		

GENERAL LEDGER

VALLEY NATIONAL BANK

1919 July 31	C271	66,067 25	1919 July 31	31	Balance	C273	23,454 50
				31			42,612 75
Aug	Balance	66,067 25					66,067 25
		42,612 75					

ACCOUNTS RECEIVABLE

1919 July 31	G265	675 00	1919 July 31	C271	16,500 00
31	S275	18,950 00			
3,125 00		19,625 00			

DEFERRED EXPENSE

1919 July 31	Insurance	G265	20 17	1919	
	Shipment				
	Charges	G265	15 39		
			44 56		

BOOKS INVENTORY

1919 July 2	G262	10,000 00	1919 July 11	31	Trading	G264	5,000 00
				31		G267	5,000 00
		10,000 00					10,000 00
Aug 1	G267	11,972 00					

STATIONERY INVENTORY

1919 July	1	G262	5,000 00	1919 July	11 31	Trading	G264	3,000 00
							G267	2,000 00
			5,000 00					5,000 00
July	31	G267	6,257 00					

MERCHANDISE INVENTORY — SHIPMENTS

1919 July	31	G265	700 00					
--------------	----	------	--------	--	--	--	--	--

FURNITURE AND FIXTURES

1919 July	1	G262	2,000 00					
--------------	---	------	----------	--	--	--	--	--

RESERVE FOR DEPRECIATION — FURNITURE AND FIXTURES

				1919 July	31		G266	15 00
--	--	--	--	--------------	----	--	------	-------

BUILDINGS

1919 July	9 9	C272 G263	1,000 00 9,000 00					
--------------	--------	--------------	----------------------	--	--	--	--	--

RESERVE FOR DEPRECIATION — BUILDINGS

				1919 July	31		G266	40 00
--	--	--	--	--------------	----	--	------	-------

# CONSIGNMENTS

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## GOODWILL

1919 July	1	G262	3,000	00						
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## NOTES PAYABLE

					1919 July	9	G263	1,000	00	
--	--	--	--	--	--------------	---	------	-------	----	--

## ACCOUNTS PAYABLE

1919 July	31	C279	19,100	00	1919 July	31	G265	5,000	00	
						31	Shp 1	65	00	
						31	P274	28,300	00	
								14,265		

## ACCRUED EXPENSE

					1919 July	31	Acc Int on Mtg Pay	G266	28	00
						31	Acc Int on Notes Pay	G266	4	67

## MORTGAGL PAYABLE

					1919 July	9	G263	8,000	00	
--	--	--	--	--	--------------	---	------	-------	----	--

## RANDOLPH JONES, CAPITAL

1919 July	12		G264	1,200	00	1919 July	1	Orig Inv	C270	30,000	00
	31	Balance		33,815	18		31	Net Gain — July	G269	5,015	18
				33,921	44					33,921	44
						Aug	1	Balance		33,815	18



## K C JOHNS, CAPITAL

1919 July	12 31				1919 July	1 1 31			
		Balance	G264	800 00 22,543 46			Orig Inv Orig Inv Net Gain — July	G262 C270 G269	16,000 00 4,000 00 3,343 46
				<u>23,343 46</u>					<u>23,343 46</u>
					Aug	1	Balance		<u>22,543 46</u>

## BOOKS SALES

1919 July	31	Trading	G267	15,130 00	1919 July	31		S275	15,130 00
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## STATIONERY SALES

1919 July	31	Trading	G267	8,405 00	1919 July	31		S275	8,405 00
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## CONSIGNMENT NO 1 — MCCLURE'S NEW BOOK STORE

1919 July	6 2 6 13 20 20 27 27		G263 C2 C2 G264 C2 G265 C2 G265	37 50 51 50 411 00 87 50 787 50 87 50 562 50 62 50	1919 July	6 13 20 27		C270 C270 C270 C1	500 00 875 00 875 00 625 00
				<u>2,875 00</u>					<u>2,875 00</u>

## COMMISSIONS EARNED

1909 July	31	Gen P & L.	G269	275 00	1919 July	6 13 20 27		G1 G264 G265 G265	37 50 87 50 87 50 62 00
				<u>275 00</u>					<u>275 00</u>

# CONSIGNMENTS

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## BOOKS PURCHASES

1919 July	31	P274	19,000 00	1919 July	31	Sh P & L Trading	SJ276 G267	2,950 00 16,050 00
			19,000 00					19,000 00

## DISCOUNT ON PURCHASES

1919 July	31	Gen P & L	G269	350 00	1919 July	31	C273	350 00
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## STATIONERY PURCHASES

1919 July	31	P274	9,300 00	1919 July	31	Trading	G267	9,300 00
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## FIRE LOSS

1919 July	11	C264	8,000 00	1919 July	11 12		C270 G264	6,000 00 2,000 00
			8,000 00					8,000 00

## SALARIES

1919 July	6 13 20 27	C272 C272 C272 C272	260 00 260 00 260 00 260 00	1919 July	31 31	Gen P & L Gen P & L	G268 G269	780 00 260 00
			1,040 00					1,040 00

## INSURANCE

1919 July	8	C2	60 00	1919 July	11	Gen P & L	G264	30 00
					31		G266	29 17
					31	Gen P & L	G5	83
			60 00					60 00

## DISCOUNT ON SALES

1919 July	31	C271	1,337 50	1919 July	31	Gen P & L	G5	1 337 50
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## DEPRECIATION

1919 July	31	Buildings	G266	40 00	1919 July	31	Gen P & L	G5	55 00
	31	Fur & Fix	G266	15 00					
				20					
				55 00				55 00	

## TRADING

1919 July	31	Books Inv			1919 July	31	Books Inv ,		
		1st per	G5	5,000 00			End period	G267	11,972 00
	31	Stat Inv				31	Stat Inv end		
		1st per	G5	2,000 00			pr	G267	6,257 00
	31	Books Pur	G5	16,050 00		31	Books Sales	G267	15,130 00
	31	Stat Pur	G5	9,300 00		31	Stat Sales	G267	8,405 00
	31	Gross P	G268	9,414 00					
				41,764 00					41,764 00

## SHIPMENT PROFIT AND LOSS

July 31	Cost of goods shipped	SJ	2,950	00	July 31	Pro of Shipments	C271	2,444	75
	Charges	C273	4	50		Pro of Shp	G265	675	00
	Charges	SJ	65	00		Charges (deferred)	G265	15	39
	Net profits	G266	815	64		Ship Inv	G265	500	00
						Ship Inv	G265	200	00
			3,835	14				3,835	14

## GENERAL PROFIT AND LOSS

1919					1919				
July 11	Insurance	G264	30	00	July 31	P & L Shipts	G266	815	64
31	Insurance	G268	83		31	Trading	G268	9,414	00
31	Salaries	G268	780	00	31	Commissions	G269	275	00
31	Disc on Sales	G268	1,337	50	31	Disc on Pur	G269	350	00
31	Interest	G266	32	07					
31	Depreciat	G268	55	00					
31	Salaries	G269	200	00					
31	K C Johns, Cap	G6	3,343	40					
31	R Jones, Capital	G6	5,015	18					
			10,854	64				10,854	64

## SHIPMENT LEDGER

## SHIPMENT No 1 — WISCONSIN CORPORATION BOOK STORE

1919					1919				
July 3		SJ276	1,750	00	July 6		C270	324	50
4		C272	2	00	13		G264	675	00
3		SJ276	30	00	20		C270	670	00
31		G266	396	64	31	Inventory	G265	500	00
					31		G265	9	14
			2,178	64				2,178	64



## CHAPTER XX

### TRANSACTIONS FOR MARCH

In the month of March the business of Williams and Day is continued on the same salary basis as in the preceding month.

March 1 The following accounts are paid in full

Haywood Furniture Co	,746 25
Tobey Furniture Co	2,002 50 disc \$7 05

March 2 A check for \$42 35 is received from Peter Wilson for a C O D sale made on February 28th

The Company also receives on consignment 100 automatic window fasteners from Beecher Sash & Door Co to be sold at \$5 00 per set on a commission of 10%. A settlement is to be made each week on fasteners sold. The Company paid cartage of 50 cents on these fasteners to the Transfer Co

March 3 The following bills are paid in cash

City Garage	00 for two new tires to replace truck tires discarded
City Garage	5 00 for 100 gallons gasoline
Jno Cox	3 00 for shoeing horses
Jay Leather Co	25 00 for additional set of harness

Receives on consignment 200 Adjustable shades from Mueller Shade Co to be sold at \$3 00 each, commission 10%. Pays \$1 25 express and cartage. Account is to be rendered each week provided a dozen or more shades are sold during the week

A C O D sale of furniture is made to the Smith Institute for \$250 00

The weekly payroll is paid

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March 5 The Smith Institute refuses to receive \$50 00 worth of the furniture sold on the 4th on the ground that the pieces are defective, and gives a check for \$200 00 covering the balance of the purchase

Collections on account have been as follows

<i>Name</i>	<i>Amount</i>	<i>Discount</i>
St Luke Hospital	\$300 00	
Smith Institute	156 00	
J H Brigham	85 75	
K C Riley	144 00	\$2 88
H P Square Business College	125 00	
Foster Hall	80 00	
Randoph Furniture Co	265 00	5 30
George Carey	76 00	
A W Martin	215 00	
J Collins	475 00	
Fulton Furniture Co	450 00	
Newsome Furniture Co	<u>386 50</u>	3 87
	2,758 45	

March 6 George Carey's check for \$76 00 is dishonored by the bank because of no funds (Remember that accounts receivable must be charged with this amount as well as George Carey's personal account)

March 7 Consignment cash sales for the past week were as follows

50 automatic fasteners	\$250 00
30 adjustable shades	90 00

Render account sales and make all necessary entries Inclose in cash the amounts due consignors

March 8 The following invoice is received from the Tobey Furniture Co :

Terms 2/10, n/30

Carpets	\$1,150 00
Furniture	<u>2,500 00</u>
	\$3,650 00

The firm ships to be sold on consignment the following goods

(a) To the Swanson Furniture Co , Carson, Mo , 10 Oriental rugs costing \$6,000 00, to be sold 40% over cost Ten per cent of the sale price is to be paid as commission Freight bill covering shipment (\$4) was received from Valley Railroad and paid An account sales is to be rendered at the end of each week covering sales made

(b) To Smithson Hardware Co , Smithville, Ill , 50 O K churns costing \$4 00 each to be sold at \$6 00 with a commission of 75 cents for each churn sold Freight of \$3 00 was paid to the Valley Railroad Co and the drayage of 50 cents paid to the Valley Transfer Co

(c) To Mason Furniture Co , Mason, Kansas, 50 Universal Filing Cabinets costing \$30 00 each to be sold at \$50 00 with commission of \$5 00 on each sale Valley Storage Co crated and delivered to the depot the cabinets making a charge of 50 cents each The freight charge by the Valley Railroad was \$15 00

March 9 On arrival of the goods listed in the Tobey invoice of March 8th, goods worth \$150 00 are returned as unsuitable Of the amount \$100 00 was for furniture and \$50 00 for carpets

Regular payroll is disbursed

Furniture was purchased from the Haywood Furniture Co on account, \$50 00

March 12 Payments are made from cash as follows Coal, \$6 00, office supplies, \$7 50 Both items are charged to general expense

Make out account sales covering the following consignment sales:

50 automatic window fasteners (sold on credit to K C Riley)  
60 adjustable shades (sold on credit to St Luke Hospital)

Credit consignor for proceeds instead of inclosing check

Received for record the following account sales

(a) From Swanson Furniture Co , Carson, Mo

Sales of Oriental rugs	\$2,800 00
Cartage	0 75
Telegram	50
Commission (10%)	<u>280 00</u>
Proceeds (check inclosed)	<u>\$2,518 75</u>



(b) From Smithson Hardware Co , Smithville, Ill :

25 O K Churns, at \$6 00		\$150 00
Repairs on imperfect churns	2 50	
Cartage	50	
Commission (75 cents)	18 75	<u>21 75</u>
Proceeds (charge)		\$128 25

(c) From the Mason Furniture Co , Mason, Kansas

20 Universal Filing Cabinets, at \$50 00		\$1,000 00
Cartage	2 00	
Commission (\$5 00)	100 00	<u>102 00</u>
Proceeds (check inclosed)		\$898 00

March 14 The Tobey invoice of March 8 is paid, the discount being \$70 00 (Remember the \$150 00 returns )

March 15 The firm decides to borrow on demand from Frank Williams \$5,000 00 at 6%, giving a note of the firm for this amount (Since a loan from a partner is on a different basis from liabilities to persons outside the business, an account, loans from partners, should be opened to which such items should be credited ) The note of the Fulton Furniture Co for \$500 00 at 7% dated January 1 and due September 1 is discounted at the bank at 8% (At the time of maturity this note will be worth its face, \$500 00, plus interest at 7% for 20 months, \$58 33, or \$558 33 The bank discounts this amount, \$558 33, for the time the note has still to run, 17½ months, at 8% The discount is \$65 14, leaving the net proceeds of the note \$493 19 The entry could be made debiting cash \$493 19 and interest \$6 81, and crediting notes receivable discounted \$500 00 Since, however, it is desirable to show in the statement of profit the earnings from interest and also the cost of interest, it is better to make the entry in this form debit cash \$493 19 and interest \$65 14, and credit notes receivable discounted \$500 00 and interest \$58 33 This entry can be made in the cash book in this form by writing the debit to interest in red ink in the General column and posting the item to the debit of interest at the end of the month )

March 16 Stock is increased by the following purchase from the Wilson Carpet Co , terms 2/10, n/30

Furniture	\$4,000 00	
Carpets	<u>2,000 00</u>	\$6,000 00

March 17 Day is allowed to withdraw \$500 00 indefinitely. The regular payroll for the week is disbursed

March 19. The Rapid Repair Co reports work done for cash as follows.

H P Square Business College	\$50 00
J Collins	75 00
H R Scott	25 00

The customers are charged for the work

March 19 Purchased furniture from the Tobey Furniture Co on account for \$50 00, and from the Lacy Lock & Safe Co on account for \$35 00

March 20 Account sales sent to consignor covering sales as follows

To Muller Shade Co

100 Adjustable Shades at \$3 00 (check inclosed) 300 00

Make out the account sales and make the necessary entries

Account sales received from the Swanson Furniture Co

Oriental rugs	\$4,200 00
Commission (10%)	420 00
Proceeds (check inclosed)	<u>\$3,780 00</u>

Received account sales from the Smithson Hardware Co as follows

25 O K Churns at \$6 00	\$150 00
Commission (75 cents)	18 75
Proceeds (check inclosed)	<u>\$131 25</u>

Received account sales from the Mason Furniture Co as follows

15 Universal Filing Cabinets at \$50 00	\$750 00
Commission	75 00
Proceeds (check inclosed)	<u>\$675 00</u>

Martindale Furniture Co dishonor their 30-day \$500 00 note.

March 22 Payments are made from cash for coal for the store, \$12 00 (general expense) and for hay, \$15 00

The firm authorizes the Swanson Furniture Co to sell the remainder of rugs at a reduction of 20% on the sale price. A sale is advertised at a cost of \$5 00 to the Swanson Furniture Co. which is charged against the shipment. The remaining rugs are sold and an account sales received. Make the appropriate entries. (Check also received)

(a) Received to be sold on consignment:

100 Universal Dictionary holders from the Central Furniture Co, Reedville, Mich, to be sold at \$5 00 on commission of 10%. The freight bill from Michigan Valley Railroad Co for \$5 00 was duly approved and entered. The drayage of \$1 00 was paid to the Valley Transfer Co

(b) Received from the same company another consignment consisting of 50 No 3 Jewel Fireless Cookers to be sold at \$15 00 on a commission of  $12\frac{1}{2}\%$

(c) Shipped to the Mason Furniture Co 100 additional Universal filing cabinets costing \$30 00 each, to be sold for \$50 00 each on a commission of 10% The freight bill from the Valley Central Railroad was \$7 50 and the crating was \$25 00 Credit Valley Storage Co for this amount

(d) Shipped to the Smithson Hardware Co 60 O K Churns costing \$4 00 each to be sold at \$6 00 on a commission of 75 cents each The freight of \$4 00 was paid to the Valley Central Railroad Co and the crating bill of \$2 50 was paid to the Valley Storage Co

March 23 The policy of paying the railroad fare of customers from surrounding towns is adopted and a check of \$25 00 is given to the Valley Commercial Association for this purpose (Advertising) A check for \$60 00 is also given to the Stoddard Poster Co to pay for advertising in surrounding towns

March 24 A check is given the Valley Central Railroad for \$55 34 to pay the freight bills not charged to the Company

The payroll for the week was disbursed

March 26 Furniture in stock was repaired by the Rapid Repair Co at a charge of \$30 00 \$25 00 is charged to General Expense and \$5 00 is charged to the Haywood Furniture Co because of their carelessness in packing

Wilson invoice March 16 is paid, discount taken being \$120 00

March 28 Office supplies are purchased from the Corner Book Store for cash, \$25 00

A desk costing \$35 00 is taken for office use (Credit furniture inventory or purchases)

March 29 In counting the cash for the day, it is found that there is a shortage of \$1 50

Sold the following and rendered account sales inclosing cash due consignor

50 Universal dictionary holders at \$5 00	\$250 00
25 No 3 Jewel Fireless Cookers at \$15 00	375 00

Received account sales from Mason Furniture Co as follows

50 Universal Filing Cabinets at \$50 00	\$2,500 00
Cartage	2 50
Commission	<u>250 00</u>
Balance due consignor (check inclosed)	<u>252 50</u> \$2,247 50

Received account sales from Smithson Hardware Co. as follows:

50 O K Churns at \$6 00		\$300 00
Warehouse charge	0 50	
Drayage	1 50	
Commission	37 50	39 50
Balance due consignor (check inclosed)		\$260 00

March 30 The People's Electric Co is paid \$26 00, covering light for the store for the month

March 31 The sales for the month have been as follows (Sales are listed all at one time to shorten the routine of entering them In actual business, of course, they would have been entered as they were made )

Cash sales furniture, \$1,500 00, carpets, \$1,400 00

Credit sales

<i>Name</i>	<i>Furniture</i>	<i>Carpets</i>
St Luke Hospital	\$750 00	\$300 00
Foster Hall	500 00	300 00
Randolph Furniture Co	800 00	400 00
Smith Institute	200 00	800 00
J H Brigham	150 00	75 00
A W Martin	225 00	55 00
Fulton Furniture Co	500 00	350 00
Rice Mfg Co	200 00	50 00
Newsome Furniture Co	1,000 00	1,500 00

George Cary, whose check was dishonored on the 7th, has gone into bankruptcy, and a settlement of claim is made at 50%

The Martindale Co pays one half the amount of their dishonored note, with promise of payment of the remainder shortly

The payroll is disbursed

## ADJUSTING AND CLOSING ENTRIES FOR MARCH

### 1. Adjustments:

(a) For depreciation. The allowance for depreciation is the same as for February, 2% on the cost of delivery equipment, and 2% of the cost of store and office furniture, and  $\frac{1}{2}$  of 1% on buildings

(b) For unexpired insurance The insurance cost for the month is the same as for February

(c) For interest on partners' loans and withdrawals. The interest to date on the loan from Frank Williams (\$12.50) should

be charged to interest and credited to Frank Williams, personal

(d) For accrued interest on notes receivable At the beginning of the month the amount of accrued interest on notes receivable was carried as an asset This accrued interest now on the books corresponds exactly to an inventory of merchandise In closing the books for March, this "inventory" of March 1 must be deducted from the interest received during the month This deduction is made by closing accrued interest into interest by an entry debiting interest and crediting accrued interest It is then necessary to place the new inventory of accrued interest on the books This is done by an entry debiting accrued interest and crediting interest

(e) For interest accrued on notes payable At the beginning of March there was a liability inventory for interest accrued This liability inventory must be closed into interest and the new inventory of interest accrued on March 31 placed on the books (Note that the entries to adjust the books for interest accrued on notes payable are, as one might naturally expect, the reverse of the entries to adjust the books for accrued interest on notes receivable )

## **2. Determining Gross Profit on Sales:**

In previous work the gross profit has been shown in trading This month gross profit is shown in sales rather than in trading (1) Gross profit is shown in sales rather than in trading so frequently that it is desirable that one become familiar with both plans, (2) when gross profit is shown in sales it is possible to determine the profit on each class of goods sold, easily The steps in closing the merchandise accounts when gross profit is shown in sales are these

(1) Purchase returns and sales returns are closed into purchases and sales.

(2) Freight-in is closed into purchases Since freight on both carpets and furniture has been charged to one account, it is necessary now to divide the cost of freight between carpet and furniture purchases on some equitable basis An examination of the freight bills shows that for this month an ap-

proximate division of freight charges on the basis of  $\frac{4}{5}$  to furniture and  $\frac{1}{5}$  to carpets is equitable.

(3) The inventories of March 1 are closed into purchases.

(4) The new inventories of March 31 are: furniture, \$35,265 70, carpets, \$10,256.47

(5) The purchase accounts now show the cost of the goods sold. The sales accounts show the net sales. When purchases are closed into sales, the balance of each sales account shows the gross profit on the sale of the goods.

### QUESTIONS AND PROBLEMS

1. What are generally the liabilities of the consignee and the consignor in the sale of goods through a consignee?

2. What record should a consignee make when goods are received to be sold on consignment?

3. If cash and credit sales of consignment goods are entered in the sales journal and posted therefrom to the respective ledger accounts, indicate the necessary form of sales journal.

4. What are the debits and credits to the consignment account, and from what books are they commonly posted?

5. Describe the content of an account sales.

6. What information is needed by the consignor in regard to the operations of the consignee?

7. Give the debits and credits to the shipment profit and loss.

8. What provision is made for the maintenance of a control over the consignment inventories in the hands of consignees?

## CHAPTER XXI

### THE INCOMING AND WITHDRAWAL OF PARTNERS

**1. Articles of Partnership.** — If two or more individuals carry on a business together and hold themselves out as partners, a partnership exists, even though there are no formal articles setting forth the rights and duties of the partners. The act of carrying on the business together and of sharing in the management and profits is sufficient in itself to establish the partnership relation. In short, articles of partnership are not essential to the existence of a general partnership.

It is advisable, however, in most instances, to have a definite partnership agreement, in order to place proper limits on the rights and duties of the partners in the conduct of the business. For an accountant, such an agreement has particular interest, because its provisions usually affect the nature of the business to be done, the character of the accounts to be kept, the division of the profits and the losses, the compensation of the partners, the interest to be allowed on the investments of the partners, the distribution of the managerial functions between or among the partners, the period between closings and audits, and the dissolution of the partnership. The articles of partnership should be read, therefore, before any accounting records are opened, or before any audit is made of the books. It need hardly be said that a lawyer rather than an accountant is the logical person to draft the partnership agreement.

**2. Books of the Partnership.** — The capital accounts of the partners and their relation to the other accounts constitute the chief problems of partnership accounting. The capital accounts of a partnership are, of course, similar to the capital account of an individually owned business. They are credited with the respective shares of the partners in the profits of the business,

and are charged with the debit balances of the respective personal accounts at the time of closing. The other accounts to be set up and the general books of record to be kept are identical with those of an individual concern of similar size.

**3. Admission of Partner without Goodwill Allowance.** — A partnership is frequently formed by the owner of an individual concern to increase the investment in the business and at the same time to bring into the concern a man competent to assist in its management. Before a partner is thus admitted, it is necessary to close the accounts of the existing firm and to determine the conditions of the partnership arrangement. One of the most important questions to be decided is the basis upon which profits and losses are to be shared. If no agreement is made covering this point, the profits and losses are shared equally. Of similar importance is the question of the capital interest the incoming partner acquires through his investment in the business.

**4. Capital Interest Acquired.** — (a) The simplest arrangement is obviously to give to the original owner a capital equal to the amount at which his capital stood at the time of the closing of his individual books, and to give to the incoming partner an interest equal to the cash or property value which he contributes to the new concern. If we assume that this amount is \$5,000 00 and that the old books are continued, the admission of the new partner is recorded by the following journal entry

Cash	5,000 00	
John Smith, Capital		5,000 00
Investment of John Smith as a partner in the business		

(b) The case is not different in principle if the incoming partner contributes other forms of property in addition to cash and the business of the new concern is carried on under the old firm name. If his assets, liabilities, and capital are accepted by the new concern at the figures shown on his own books of record, the journal entry marking his engagement in the partnership relation becomes the following:



Sundry Assets (Detailed)	10,000 00	
Sundry Liabilities (Detailed)		5,000 00
John Smith, Capital		5,000 00
Assumption of the assets and liabilities of John Smith as a partner in the business		

This entry on the books of the partnership is clearly identical in form with the opening entry on the books of an individual business where the assets and liabilities of another concern are taken over

(c) Frequently, when a partner is taken into a business, his assets are revalued by the firm of which he is to become a member. Where such is the case, the books of the incoming partner must be readjusted so as to bring his record of asset balances to the amount agreed upon as their transfer value. If a series of readjustments must be made, it is advisable to open an adjustment account. Any reductions in asset valuations are then charged to this account and credited to the assets affected. After the necessary readjustments have been made, the account is closed into capital.

Let us suppose, for example, that the furniture and fixtures account is to be reduced by \$75 00, the inventory account by \$150 00 and accounts receivable by \$100 00. All three readjustments may be placed on the books by the following journal entry:

Adjustments	325 00	
Furniture and Fixtures		75 00
Inventory		150 00
Accounts Receivable		100 00
Adjustment of asset balances		

After the necessary postings have been made, the adjustment account is closed into the capital account, as follows

John Smith, Capital	325 00	
Adjustments		325 00
Closing of adjustments into capital		

Where the members of a partnership are taken in as partners in another concern, the adjustment account must be appor-

tioned to their respective capital accounts in the old firm. In such cases, the adjustment account represents a material saving, for, if each reduction in assets were to be distributed as a loss to the several partnership accounts, the number of such distributions would be limited only by the number of items to be readjusted.

After the required adjustments and closings have been made, a new balance sheet is drawn up to serve as the basis for the transfer of the assets and liabilities at the agreed valuation. The items are actually entered on the books of the new firm in the manner set forth in (b) above.

An incoming partner not infrequently demands that adjustments be made in the valuation of the assets and liabilities of the business of which he is to become a member. If the new firm created by his admission uses the same books of record employed by the old concern, the readjusting entries are placed on the books of the old firm in a manner similar to that illustrated in (c) above. The revised balance sheet is then recorded on the books of the new business, and in conjunction with the balance sheet of the business taken over serves as the basis for the opening entry of the new concern in connection with the admission of the additional partner.

**5. Admission of Partner with Goodwill Allowance.** — Goodwill is not recorded on the books of a partnership unless its value is definitely determined through some transaction connected with the admission or withdrawal of a partner. During the early period of its existence, a business is usually regarded as fortunate if an ordinary return is received on the actual investment of the owners. After the business has been in operation for a period of years, it not infrequently earns a larger return than that commonly made on the amount invested. This larger return is due, of course, to an increased volume of business which the firm has secured through the good management of the enterprisers. Since these larger profits are usually secured only after a more or less extended period of operation, goodwill is sometimes calculated as worth four or five times the average annual net profits of the business, on the assumption that this

length of time is required to place the business on a good earning basis. A more common basis of calculating goodwill is to capitalize the excess of the average annual net profits for a short period of years beyond what is regarded as a reasonable return on the actual business investment. These considerations, however, have largely to do with the basis upon which the partners proceed in the determination of goodwill.

Let us assume that John Smith has a capital of \$5,000 00, and that he sells a half interest to John Doe for \$3,000 00, the money being paid to Smith personally and not to the business in which Doe becomes a partner. If the business of John Smith is worth \$5,000 00, manifestly a half interest should sell for \$2,500 00. The \$500 00 excess may be regarded as a payment for goodwill. A conservative rule, much advocated, requires that goodwill be placed on the books only when it has been purchased by the business. In this transaction there has been no purchase of goodwill, but its market value may be regarded as established at \$1,000 00 through the payment of \$500 00 for a half interest therein. If this reasoning is adopted, the transaction is journalized as follows:

Goodwill	1,000 00	
John Smith, Capital	2,000 00	
John Doe, Capital		3,000 00
Purchase of half interest in the business by John Doe through payment to John Smith of \$3,000 00 cash		

If the more conservative practice is followed of avoiding an entry to the debit of goodwill unless actually purchased, the journal entry becomes the following:

John Smith, Capital	2,500 00	
John Doe, Capital		2,500 00
Purchase of half interest in the business by John Doe through payment to John Smith of \$3,000 00 cash		

Let us suppose that, instead of paying \$3,000.00 to John Smith personally for a half interest in his business, John Doe

contributes \$6,000 00 to the business itself for a half interest therein. This transaction may be assumed to establish a \$1,000 00 value for the goodwill of the business, and, if the goodwill entry is allowed, is journalized as follows

Cash	6,000 00	
John Doe, Capital		6,000 00
Purchase of half interest in the business of John Doe		
Goodwill	1,000 00	
John Smith, Capital		1,000 00
Credit for goodwill established in connection with admission of John Doe as partner with a half interest allowance of \$6,000 00		

Under more conservative treatment, the transaction is recorded by means of the following entry

Cash	6,000 00	
John Doe, Capital		5,500 00
John Smith, Capital		500 00
Purchase of half interest in the business by John Doe for \$6,000 00		

If instead of merely cash John Doe brings into the new concern a business of his own, it is entirely possible for him to receive an allowance for goodwill instead of consenting to such an allowance to the firm with which he becomes connected. If he is given a \$5,000 00 interest for an asset contribution of \$4,000 00, the new concern is making a goodwill purchase of \$1,000 00 and crediting the amount to the capital account of the incoming partner. Such a procedure represents the conservative practice of placing goodwill on the books at the actual cost price.

Let us now suppose that John Doe becomes a half-interest partner by the simple payment of \$4,000.00 cash. If no compensating allowance is to be made, the admission of the new partner is recorded by the following journal entry:

Cash	4,000 00	
John Smith, Capital	500 00	
John Doe, Capital		4,500 00
Purchase of half interest in the business by John Doe for \$4,000 00		

Such an entry, however, in view of the goodwill entries made above, is easily open to criticism for not still further reducing the capital account of John Smith. If a partner buys a half interest for \$4,000 00, on what ground can it be urged that the whole business is worth more than double this sum? Does not the sale demonstrate that the market value of the assets of the old business has decreased by \$1,000 00? In other words, if the payment of \$6,000 00 for a half interest established a goodwill asset of \$1,000 00, why does not the payment of \$4,000 00 for a half interest give rise to a shrinkage charge of \$1,000 00 against the value of the business assets? Such a shrinkage can, of course, be set up by a journal entry, as follows

Shrinkage in Value of Total Assets	1 000 00	
Goodwill Depreciation Reserve		1,000 00
Creation of depreciation reserve to record decrease in value of business as a whole		

The amount of the shrinkage is then charged to John Smith by the following additional entry

John Smith, Capital	1,000 00	
Shrinkage in Value of Total Assets		1,000 00
Charge to capital of decrease in business goodwill		

The result of these two entries is to produce the following modification of the partnership record

Cash	4,000 00	
John Doe, Capital		4,000 00
Purchase of a half interest in the business by John Doe through the contribution of \$4,000 00 cash		

Some question may well be raised, however, concerning the conclusion that the payment of an amount less or greater than

the total assets establishes a goodwill item as definitely as the entries seem to indicate. On the one hand, the incoming partner may be undesirable as a counselor, because of his short experience or lack of training. In such a case, the extra charge may not be wholly a question of goodwill. On the other hand, a payment of less than half the value of the total assets for an equal interest in the business may be an indication of a high estimation of the ability and experience of the incoming partner. It is questionable, therefore, whether the tendency to depart from conservative practice and to place goodwill on the books when it has not been purchased, is justified as a general rule. Such deviations may be proper as exceptions if the facts clearly demonstrate that a fairer valuation would result from their use. In any event, they should be allowed only after very careful analysis of each particular case.

**6. Purchase of Interest of Retiring Partner.** — A goodwill item may well arise through the purchase of the interest of a retiring partner. If partner *A*, having an interest of \$5,000.00, is allowed this amount by the remaining firm member out of the funds of the business, the retirement of *A* from the concern is recorded by means of the following journal entry:

<i>A</i> , Capital	5,000 00	
Cash		5,000 00
Allowance to <i>A</i> of the book value of his interest upon his retirement from the firm		

If, however, *A* is allowed \$5,500.00 for his interest upon retirement, the transaction may be journalized as follows

<i>A</i> , Capital	5,000 00	
Goodwill	500 00	
Cash		5,500 00
Allowance to <i>A</i> of \$500.00 in excess of the book value of his interest upon his retirement from the firm		

If it is assumed that *B*'s interest in the firm is also \$5,000.00, it becomes fair to argue that the purchase of an equal partner's interest at \$500.00 in excess of its book value must establish

,000 00 as the worth of the entire goodwill of the business. If this interpretation is accepted, the transfer of *A*'s interest to *B* may be recorded by the following entry.

<i>A</i> , Capital	5,000 00	
Goodwill	1,000 00	
<i>B</i> , Capital		500 00
Cash		5,500 00
Allowance to <i>A</i> of \$500 00 in excess of the book value of his interest upon his retirement from the firm		

In the foregoing argument, it has been assumed that goodwill is attached to the business and not to the individual. It is probably true, however, that goodwill is to some extent a personal matter, and that in going away from the firm *A* does not transfer all of his goodwill to the concern. This fact is ordinarily taken into consideration by the remaining members of the firm in the negotiations for the interest of the retiring partner. Moreover, the personality and reputation of an incoming partner would have a bearing on whether he would be allowed a half interest at a price in excess of the capital interest already existing or at a lower figure.

Strictly speaking, of course, there has been no purchase of goodwill by the business in the transaction assumed above, the goodwill of the firm after *A*'s retirement being no greater than it was before. Consequently, ultra-conservative practice requires the elimination of the goodwill item in the journal entry, thereby forcing it to assume the following form.

<i>A</i> , Capital	5,000 00	
<i>B</i> , Capital	500 00	
Cash		5,500 00
Allowance to <i>A</i> of \$500 00 in excess of the book value of his interest upon his retirement from the firm		

Let us suppose now that *A* received only \$4,500.00 for his \$5,000.00 interest in the business. If no consideration is given to the matter of goodwill, the transaction is journalized as follows:

<i>A</i> , Capital	5,000 00	
Cash		4,500 00
<i>B</i> , Capital		500 00
Purchase of <i>A</i> 's \$5,000 00 interest by <i>B</i> for \$4,500 00 cash		

As a result of this entry, *B*'s capital would be increased to \$5,500 00. In all probability, however, the sale of *A*'s interest for \$4,500 00 indicated that this particular half interest was worth less than its recorded book value. It would seem to follow that *B*'s half interest is also worth less than its book value in a corresponding ratio. To establish the actual market valuation of the proprietorship interest in the concern, the following entry may be made

Shrinkage in Value of Total Assets	1,000 00	
Goodwill Depreciation Reserve		1,000 00
Creation of depreciation reserve to record decrease in value of the business as a whole		

This shrinkage should, of course, be borne by the partners alike as follows

<i>A</i> 's Capital	500 00	
<i>B</i> 's Capital	500 00	
Shrinkage in Value of Total Assets		1,000 00
Charge to capital accounts of decrease in business goodwill		

The entry recording *A*'s retirement from the concern then becomes

<i>A</i> 's Capital	4,500 00	
Cash		4,500 00
Purchase of <i>A</i> 's half interest for 4,500 00 cash		

This latter treatment does not represent established accounting practice. It is given merely for the purpose of carrying out a logical program of setting up book values for partnership assets on the basis of the price established for these assets through the sale of an interest in the concern. The sale of an interest cannot, of course, be relied upon with assurance to define the



market price of the entire proprietorship interest. There are frequently factors affecting the market price of a part interest which would not necessarily apply to the interest as a whole.

A consideration of the various possibilities in the sale of a part interest in a business throws doubt on the propriety of the whole series of entries in which a goodwill value is regarded as established by the sale of an interest either to the concern itself or to an incoming partner. The old rule of not allowing an entry of goodwill on the books unless actually purchased by the business should be strictly adhered to, except where the particular circumstances clearly indicate that a different entry would more fairly represent the facts.

### QUESTIONS AND PROBLEMS

1. What are the tests in regard to the existence of a general partnership?
2. What subjects should articles of partnership cover?
3. With what particular accounts are the chief problems of partnership accounting connected?
4. If a partner comes into the business without provision as to how the profits and losses will be divided, how are profits and losses shared?
5. What is the use of an adjustment account? What items are debited to it and what items are credited?
6. How is goodwill created?
7. On what basis is goodwill calculated?
8. What is the conservative rule in relation to the price at which goodwill should be placed on the books?
9. On what other basis than purchase price is goodwill frequently entered on partnership books?
10. A and B are equal partners with an investment of \$20,000 each. They desire to secure additional capital with which to extend the business and agree to admit C as an equal partner on the payment of \$14,000 into the firm. Give the entries to record the admission of C, (1) keeping an account with goodwill, and (2) eliminating goodwill from the accounts.
11. X and Y are partners with an investment of \$20,000 each. The business is highly prosperous. Z is admitted as an equal partner on the payment of \$25,000 into the firm. Give the entries to record the admission of Z, (1) keeping an account with goodwill, and (2) eliminating goodwill from the accounts.
12. D has invested \$15,000 in a business. He agrees to sell to E a one-half interest in the business as it stands for \$8,000. Give the entries to admit E to the partnership, assuming the keeping of an account with goodwill.

## CHAPTER XXII

### DISTRIBUTION OF THE PARTNERSHIP PROFITS

**1. Basis of Distribution.** — Although the partners are in a certain sense creditors of the firm in which they hold a controlling interest, one of the primary characteristics of a partnership is that the claims of outside creditors outrank those of the partners themselves. The partners may create priorities affecting the funds which they themselves contribute, but they cannot create claims for themselves against the assets or income of the business superior to those of outside creditors. For instance, the partners may agree that each shall be entitled to a definite wage, to be charged as a part of the operating expenses, before there is any distribution of the profits. This agreement holds so far as the claims of the partners are concerned, but does not affect the priority of outside claims if the gross income is insufficient to meet all of the operating expenses of the business. As owners of the business, the partners may set up a series of mortgages or priorities affecting the rank of the liabilities as well as a similar series of priorities with respect to their own claims. They cannot, however, make their partnership claims superior to those of outside parties. In other words, the income of a general partnership must be used first to meet the outside liabilities, and then to satisfy the claims of the partners themselves. In fact, the claims of outside creditors go beyond the income and assets of the business, and become a charge against the personal assets of the partners, individually as well as collectively.

**2. Interest Claims of Partners.** — A partner may lend money to the business and receive the firm's note payable, or the capital of each partner may be fixed at a definite figure, with the understanding that contributions in excess of these amounts shall be treated as loans upon which the business is to pay in-

terest Conversely, it may be agreed that the partners shall pay interest on drawings which bring their investments below the amounts fixed as their respective capital shares While these interest claims of the partners against the business may be made to rank ahead of their profit-sharing claims, as explained above, they must always be subject to the rights of outside creditors

The note payable and interest claims of the partners against the business are of an entirely different character from the profit-sharing rights they may hold The partner who is the owner of one of the firm's notes may legally compel an accounting and, if necessary, a sale of the assets to meet his claim As against the other partners, the particular partner's claim carries with it all the rights ordinarily pertaining to such an investment

It is frequently stipulated in the partnership agreement that each partner shall receive annually a certain percentage on his capital investment before there is any distribution of the profits for the year Such a provision is generally regarded as a supplementary device for dividing profits rather than as a device for creating interest claims against the income of the business Such claims are, therefore, treated as deductions from the net profits and not as expenses chargeable to income before the net profits are ascertained The agreement not infrequently further specifies whether these claims are to be met only in so far as the annual net profits may suffice, or whether any deficit created thereby is to be charged to the capital accounts of the partnership in the loss and gain sharing ratio

These various considerations lead to the following classifications of the partnership interest claims: (a) Interest to outside creditors, (b) interest on partners' loans, (c) interest on partners' capitals As the latter two classes, as well as the matter of interest on withdrawals, are based on the understanding of the partners themselves, it is of the greatest importance that the partnership agreement should clearly define the rights of the partners in the matter of the payment and receipt

of interest as well as in the matter of the distribution of losses and gains.

**3. Distribution of Profits.** — In the absence of a definite understanding to the contrary, the profits of a partnership are divided equally between or among the partners. Some of the forms of distribution by agreement are as follows

*a Distribution of Profits on Basis of Capitals at Beginning of Period* — If the profits are to be shared on a basis of the capitals at the beginning of the period, the partners should have an understanding with reference to drawings and to contributions in excess of capital. Salaries for services and interest on drawings serve as protective measures in this regard. Let us suppose that, under such an arrangement, the net profits for the year of the firm of *A* and *B* are \$6,000 00, *A*'s capital at the beginning of the period being \$12,000 00 and *B*'s \$18,000 00. If the interest on *A*'s drawings during the year amounts to \$150 00, and the interest on *B*'s drawings amounts to \$75 00, the following capital charges must be made before the annual profits are distributed

<i>A</i> 's Capital	150 00	
<i>B</i> 's Capital	75 00	
Interest on Drawings		225 00
Interest on year's drawings		

The interest on drawings account is then closed into profit and loss, though not into the section in which the net profits are calculated. This done, the total profits of \$6,225 00 are divided in the proportion of  $\frac{2}{5}$  to *A* and of  $\frac{3}{5}$  to *B*, the distribution being journalized as follows.

Profit and Loss—Balance	6,225 00	
<i>A</i> 's Capital		2,490 00
<i>B</i> 's Capital		3,735 00
Distribution of year's profits		

The closing of the principal section of the profit and loss account and the opening of the distribution section is effected by the following journal entry:

Profit and Loss — Net Profits	6,000 00
Profit and Loss — Net Profits (down)	6,000 00
Bringing down of net profits to distribution section of account	

With this entry posted, the profit and loss account will appear as follows:

#### PROFIT AND LOSS

1919			1919		
Dec 31	Sundry Ex	15,000 00	Dec 31	Gross Profits	
	Net Profits	<u>6,000 00</u>		(down)	<u>21,000 00</u>
		<u>21,000 00</u>			<u>21,000 00</u>
Dec 31	Balance for		Dec 31	Net Profits	
	Distribution	6,225 00		(down)	6,000 00
				Interest on	
				Drawings	<u>225 00</u>
		<u>6,225 00</u>			<u>6,225 00</u>

If the two partners had paid to the business in cash the amount of the interest on their drawings, the payments would have constituted an actual income of the business. The interest charges made above, however, merely serve to readjust the profit distributions, and do not affect the total amount to be divided. Though the amount to be distributed is apparently increased by \$225 00, a like amount has been deducted from the capitals of the partners. The really significant factor is that, while the deductions were in the ratio of 2 to 1, the additions are in the ratio of 2 to 3. In other words, although *A* and *B* together gain nothing by the readjustment, *B* suffers less than *A* in the deductions and acquires more than *A* in the distribution.

*b Distribution of Profits on Basis of Average Capital Invested.* — Let us suppose that, instead of following the previous plan, the partners agree to divide the profits of the firm on the basis of the average amount each has contributed during the year, the record of their investments and withdrawals being as follows:

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	<i>Partner A</i>	
1919	<i>Investments</i>	<i>Withdrawals</i>
January 1	\$10,000 00	
February 1	1,000 00	
March 1		\$500 00
April 1		200 00
May 1	400 00	

	<i>Partner B</i>	
1919	<i>Investments</i>	<i>Withdrawals</i>
January 1	\$15,000 00	
February 1		\$500 00
March 1		300 00
April 1	750 00	
July 1		200 00
September 1	1,000 00	

A simple method of averaging the investments and withdrawals is to reduce them to a month equivalent, as follows.

<i>A's Investments</i>		
\$10,000 00 × 12	\$120,000 00	
1,000 00 × 11	11,000 00	
400 00 × 8	<u>3,200 00</u>	
Month Equivalent		\$134,200 00
<i>A's Withdrawals</i>		
\$500 00 × 10	\$5,000 00	
200 00 × 9	<u>1,800 00</u>	
Month Equivalent		<u>6,800 00</u>
Average Investment, Month Equivalent		<u><u>\$127,400 00</u></u>
<i>B's Investments</i>		
\$15,000 00 × 12	\$180,000 00	
750 00 × 9	6,750 00	
1,000 00 × 4	<u>4,000 00</u>	
Month Equivalent		\$190,750 00
<i>B's Withdrawals</i>		
\$500 00 × 11	\$5,500 00	
300 00 × 10	3,000 00	
200 00 × 6	<u>1,200 00</u>	
Month Equivalent		<u>9,700 00</u>
Average Investment, Month Equivalent		<u><u>\$181,050.00</u></u>

The average investment of each partner for a single month having thus been determined, the net profits are divided in the ratio of 127,400 00 to 181,050 00. In other words, *A*'s share will be  $\$6,000.00 \times 127,400/308,450$ , or \$2,478.46, while *B*'s share will be  $\$6,000.00 \times 181,050/308,450$ , or \$3,521.54.

Another method of calculating the average investment involves a consideration of the time for which the investment remains unchanged, thus

<i>A's Investment</i>	<i>Time Unchanged</i>	<i>Month Equivalent</i>
10,000 00	1 Month	\$10,000 00
11,000 00	1 Month	11,000 00
10,500 00	1 Month	10,500 00
10,300 00	1 Month	10,300 00
10,700 00	8 Months	85,600 00
	<u>12 Months</u>	<u>\$127,400 00</u>

<i>B's Investment</i>	<i>Time Unchanged</i>	<i>Month Equivalent</i>
\$15,000 00	1 Month	\$15,000 00
14,500 00	1 Month	14,500 00
14,200 00	1 Month	14,200 00
14,950 00	3 Months	44,850 00
14,750 00	2 Months	29,500 00
15,750 00	4 Months	63,000 00
	<u>12 Months</u>	<u>\$181,050 00</u>

The result of this method is obviously the same as that of the preceding one. As in the second method, however, the sum of the months for which the various amounts remain unchanged should equal the number of months for which the average investment is computed, a safeguard against error is provided not to be found in the method first discussed.

*c Distribution of Profits on Basis of Capitals at End of Period* — It is inadvisable to distribute profits on the basis of the investments at the end of a period, unless it is strictly understood that no partner can add to his capital without the consent of the other members of the firm. Otherwise, a partner can affect favorably his own share in the distribution by a large addition to his capital toward the close of the period.

The basis is, in fact, not commonly used, and is of importance mainly in connection with liquidating dividends

*d Distribution of Profits Partly on Basis of Capitals at Beginning of Period and Partly on Basis of Agreed Ratio* — It is sometimes stipulated that a certain percentage on capitals shall be paid to the partners before the balance to be distributed is divided upon an agreed ratio. As was pointed out above, this percentage on capitals is not regarded as interest, in the ordinary sense of the term, and is not, therefore, charged to the regular interest account. Interest on partners' capitals is the name generally given to the account covering these charges. While the account is closed into profit and loss, it is placed in the distribution section, along with interest on withdrawals. There might also be an interest credit on contributions in excess of the capitals at the beginning of the period. This interest on excess capital would be a charge against net profits in the distribution section of the profit and loss account, and a credit to the respective capitals.

There are several forms in which this method of distribution may be made. It may be agreed, for instance, that interest on partners' capitals shall be allowed only to the extent to which it is earned. Unless a limitation of this kind is set up, the interest claims may create a deficit in the balance of profit and loss, to be charged to the capital accounts on the profit and loss sharing ratio. Again, the agreement may provide that half of the profits or losses shall go to the partners on the basis of their investments at the beginning of the period or on the basis of their average investments for the time, the other half to be divided according to fixed proportions. It is, therefore, of importance to consider the various possibilities, and to let the articles of partnership definitely express the wishes of the members of the concern.

### QUESTIONS AND PROBLEMS

1. A and B are general partners without an agreement as to the division of profits and losses. A has a capital of \$10,000.00 and B a capital of \$12,000.00. They have profits of \$5,000.00 and decide to allow 5% on their



respective capitals before division    Journalize the distribution of profits and set up a ledger record of it

2    M, N, and O are partners, sharing equally in the profits, but with unequal investments on which interest is allowed before the remaining profits are distributed    At the end of a year there is due M for interest \$250 00, N \$125 00, and O \$225 00    The profits for the year before interest charges are taken into account are \$3,600 00    (1) Make the entries to adjust interest and profits, using the nominal accounts of interest on partners' investments for the interest charges

3    A, B, and C are partners having capitals as follows    A, \$10,000 00, B, \$15,000 00, and C, \$20,000 00    A has loaned \$4,000 00 to the business at 6%, B has loaned \$4,000 00 at 6%, and C has loaned \$6,000 00 at 6%    There is an understanding that interest will be allowed on capitals at 5% and that the balance of net profits will be divided equally    The net profits of the year are \$1,500 00    Give the journal entries involved in its distribution

## CHAPTER XXIII

### LIQUIDATION OF A SOLVENT PARTNERSHIP

**1. Sources of Partnership Funds.** — Where the partners themselves have furnished all the funds necessary to the purchase of the assets of the partnership, the distribution of the funds arising from the liquidation of the business is not a complex problem. The assets or the proceeds of their sale are simply distributed to the partners on the basis of their capital balances or on whatever basis may be stipulated in the partnership agreement. There are usually, however, a number of outside creditors, some of whom not infrequently hold a mortgage against specific assets to secure the loan of money or the sale of goods on credit. Furthermore, the wage earners at the time of liquidation may not have been paid in full, and thus have a preferential claim against the assets of the business. Not infrequently, too, the partnership is indebted to the individual partners for funds advanced by them in addition to their capital investments. As a final complication, the proceeds of liquidation may be distributed at intervals rather than at one time after all the assets have been sold.

**2. Causes of Liquidation.** — A partnership may be liquidated for one or more of the following reasons: (a) One of the partners may die, in which case the estate of the decedent can demand a settlement for his interest. This settlement involves either a purchase of this interest by one of the surviving partners or by an outsider whom the surviving partners are willing to take into the firm, or a sale of all the assets and a distribution of the proceeds. (b) The obligations to outside creditors may not be paid at maturity, and liquidation may be forced for the satisfaction of their claims. (c) The partners may voluntarily agree to discontinue the business, or the term or purpose for which the partnership was established may be fulfilled.

(d) One of the partners may force a liquidation for the satisfaction of a credit claim arising out of a loan to the firm.

The accounting problems occasioned by the taking in of a new partner and by the purchase of the interest of a retiring partner have already been discussed in a preceding chapter. We shall now take up the more complicated cases, which require a sale of all the assets and a distribution of the proceeds among a variety of claimants on the basis of the priority of their claims.

**3. Liquidating Dividends.** — The proceeds of liquidation of a partnership are applied (1) to the payment of claims of outside creditors, (2) to the payment of loans by the partners to the business, and (3) to the payment of the partners' capital investments. Before any liquidating dividends can be made on account of the partners' capitals, however, the losses from liquidation must first be distributed as charges to the partners' capital accounts on the basis of the profit and loss sharing ratio. These losses are, of course, the excess of the book value of the assets over the price at which they are sold. For example, if land and buildings, furniture and fixtures, and delivery equipment are carried on the books at \$25,000 00, \$5,000 00, and \$2,500 00, and are sold for \$20,000 00, \$4,000 00, and \$2,000 00, respectively, the losses from liquidation are \$6,500 00. The transaction would, therefore, be journalized as follows:

Cash	26,000 00	
Losses from Liquidation	6,500 00	
Land and Buildings		25,000 00
Furniture and Fixtures		5,000 00
Delivery Equipment		2,500 00

On the assumption that *A* and *B* are partners sharing profits and losses equally, the foregoing losses, at the time of closing the books, would be charged to their capital accounts in equal amounts, as follows.

<i>A</i> 's Capital	3,250 00	
<i>B</i> 's Capital	3,250 00	
Losses from Liquidation		6,500 00

**4. Liquidating Dividends to Creditors.** — The claims of outside creditors are paid in the order of their priority. If there are preferential claims, as for wages, taxes, court costs, etc., these in Texas must first be met in full. Next in rank are the creditors whose claims are wholly or partially secured, the proceeds arising from the sale of the mortgaged or hypothecated assets being first applied to the satisfaction of the obligations they were pledged to secure. If there is a surplus over the amount required to meet these claims, this surplus is available to meet the claims of unsecured or general creditors. If there is a deficit, the deficiency ranks as an unsecured or general claim against the free assets of the business. Thus, if the proceeds of liquidation are sufficient to pay the preferential and secured claims and in addition 25 per cent of the unsecured claims of general creditors, the preferential and secured creditors will be paid in full, while the unsecured or general creditors will receive a liquidating dividend of 25 per cent, distributed ratably on the basis of the amounts of their respective claims.

**5. Payment of Loans from Partners** — Loans from partners should never be paid until losses from liquidation have been distributed, for it may well happen that the aggregate of the losses chargeable to one of the partners may exceed his capital investment. If his loan has not been paid, the capital deficiency may be charged to the partner's loan account, whereas, if the loan has been paid and the partner becomes insolvent, the capital deficiency becomes a loss to the other partners. For example, suppose that *A* and *B* have capital investments of \$5,000 00 and \$15,000 00, respectively, and share profits and losses equally. Let us suppose, further, that they have loaned the business \$4,000 00 and \$6,000 00, respectively. In the process of liquidation, the assets are sold for \$14,000 00, involving a loss of \$16,000 00. *A*'s portion (\$8,000 00) would exceed his capital investment by \$3,000 00. If *A* were insolvent and his loan account had already been paid, his capital deficiency would become an additional loss to *B*. If the losses from liquidation had been charged to the partners' capital accounts before any liquidating dividend had been made on

account of the partners' loans, the capital deficiency could have been remedied as follows.

A's Capital	5,000 00	
A's Loan	3,000 00	
B's Capital	8,000 00	
Losses from Liquidation		16,000 00

The \$14,000 00 of cash received for all the assets would then be distributed as follows.

A's Loan	1,000 00	
B's Loan	6,000 00	
B's Capital	7,000 00	
Cash		14,000 00

With these journal entries, the accounts of the partnership would be closed and the business liquidated.

**6. Problems of Liquidation in Periodical Dividends.** — When the process of liquidation extends over a long period, the creditors may desire partial payments from time to time as the assets are sold. Where this plan of liquidation is adopted, there will ordinarily be expenses of liquidation. These expenses may be closed into the account of Losses from Liquidation, or may be charged to this account in the first instance if the transactions are small in number. Before a liquidating dividend is declared, these losses and expenses are charged to the partners' capital accounts on the profit and loss sharing ratio.

Let us suppose that *A*, *B*, and *C* are partners sharing profits and losses equally. On December 31, 1919, they have assets and liabilities as shown on the following page.

## A B C COMPANY

## BALANCE SHEET, DECEMBER 31, 1919

<i>Assets</i>		<i>Liabilities</i>	
Real Estate	\$25,000 00	Mortgage on Real Es-	
Other Assets	132,500 00	tate	\$15,000 00
		Notes Payable (se-	
		cured)	40,000 00
		Accounts Payable	25,000 00
		A's Loan	10,000 00
		B's Loan	15,000 00
		C's Loan	7,500 00
		A's Capital	15,000 00
		B's Capital	20,000 00
		C's Capital	10,000 00
	<u>\$157,500 00</u>		<u>\$157,500 00</u>

Early in January, 1920, it is decided to liquidate the business, and during the month the following sales are made.

	<i>Cost</i>	<i>Sale Price</i>
Real Estate	\$25,000 00	\$20,000 00
Other Assets	30,000 00	22,000 00
	<u>\$55,000 00</u>	<u>\$42,000 00</u>

The expenses of liquidation for January are \$2,000 00

The foregoing transactions may be journalized as follows

Cash	42,000 00	
Losses and Expense from Liqui-		
dation	13,000 00	
Real Estate		25,000 00
Other Assets		30,000 00
Losses and Expense from Liqui-		
dation	2,000 00	
Cash		2,000 00
A's Capital	5,000 00	
B's Capital	5,000 00	
C's Capital	5,000 00	
Losses and Expense from		
Liquidation		15,000 00

From the balance of cash (\$40,000 00), it is possible to pay the mortgage in full and \$25,000 00 on the notes payable, which are secured. The distribution would be journalized as follows

Mortgage on Real Estate	15,000 00	
Notes Payable (secured)	25,000 00	
Cash		40,000 00

A statement of the transactions for the month would involve a summary statement of the January liquidations together with a balance sheet showing the conditions of the business after these liquidations had taken place. The summary of liquidation might be made as follows.

	<i>Sale Price</i>	<i>Liquidation Losses</i>
Cash Received during Month		
Sale of Real Estate	\$20,000 00	\$5,000 00
Sale of Other Assets	22,000 00	8,000 00
Total Cash Received	42,000 00	
Expenses of Liquidation	2,000 00	2,000 00
Balance of Cash	40,000 00	
Cash Distribution		
Mortgage on Real Estate	15,000 00	
Notes Payable	25,000 00	
Total Losses in Liquidation		15,000 00
Losses Charged as Follows		
A's Capital	5,000 00	
B's Capital	5,000 00	
C's Capital	5,000 00	15,000 00

### A B C COMPANY

#### BALANCE SHEET, JANUARY 31, 1920

<i>Assets</i>	<i>Liabilities</i>
Other Assets	Notes Payable (secured)
\$102,500 00	\$15,000 00
	Accounts Payable
	25,000 00
	A's Loan
	10,000 00
	B's Loan
	15,000 00
	C's Loan
	7,500 00
	A's Capital
	10,000 00
	B's Capital
	15,000 00
	C's Capital
	5,000 00
<u>\$102,500 00</u>	<u>\$102,500 00</u>

During the month of February, the remaining assets are sold for \$70,000 00 at an expense of \$3,500 00. The journal entries recording the sale and distribution of the liquidation losses would be as follows:

Cash	70,000 00	
Losses from Liquidation	32,500 00	
Other Assets		102,500 00
Losses and Expense from Liquidation	3,500 00	
Cash		3,500 00
A's Capital	10,000 00	
A's Loan	2,000 00	
B's Capital	12,000 00	
C's Capital	5,000 00	
C's Loan	7,000 00	
Losses and Expense from Liquidation		36,000 00

The cash balance of \$66,500 00 would then be distributed by means of the following entry:

Notes Payable (secured)	15,000 00	
Accounts Payable	25,000 00	
A's Loan	8,000 00	
B's Loan	15,000 00	
C's Loan	500 00	
B's Capital	3,000 00	
Cash		66,500 00

A summary of the liquidation operations should again be made for the month of January, though this time there would be no balance sheet, inasmuch as all the assets have been sold and all the liabilities liquidated.

Let us now suppose that at the end of January the balance of each of the capital accounts was in excess of the chargeable losses, and that at the same time funds were available to pay in full the claims of outside creditors and 50 per cent of the partners' loan accounts. The question then arises as to whether there should be a ratable distribution to the partners according to their loan account balances. Such a course would be proper were it not for the fact that one cannot foresee how great



future losses from liquidation may be. A future loss chargeable to one of the partners may well exceed the balance of his capital account and the remaining 50 per cent of his loan account. If this should happen in the case of an insolvent partner, it would vitiate the distribution of losses on the profit and loss sharing ratio and result in the final charge of the insolvent partner's share to his solvent copartners. To avoid such an occurrence, it is sometimes urged that any periodic dividend on loans to partners should be made so as to reduce the loan balances to the profit and loss sharing ratio. Such a procedure will not, however, insure the final apportionment of losses on the profit and loss sharing ratio, unless the balance of the capital accounts are brought to the same ratio, for, where the capital balances are not in the profit and loss sharing ratio, a loss chargeable to one of the partners may at a subsequent date exceed his capital balance and fall on his loan, thus disturbing the profit and loss sharing ratio which had been set up.

There are, however, possibilities of a periodic settlement involving loans and capitals without endangering the distribution of losses on the profit and loss sharing ratio. If liquidation has at any time proceeded to the point where the cash balance exceeds the loans from partners by an amount sufficient to reduce the capitals to the profit and loss sharing ratio, a distribution that will retire the partners' loans and reduce the capitals to the profit and loss sharing ratio may safely be made.

The prior claim for distribution of losses on the profit and loss sharing ratio destroys the priority of partners' loans over their capital in the case of the liquidation of a solvent partnership. If the rule for charging losses on the profit and loss sharing ratio is held to be binding so that losses can be charged against partners' loans instead of their capital when the losses for any partner exceed loans, then no valuable right is sacrificed by the partners if they add their loans to their capitals for purposes of liquidation and create an account of loan and capital for each partner which represents his personal claim against the assets. Distribution of liquidating dividends should then be made so that the totals of the partnership claims of the

several partners will be reduced to the profit and loss sharing ratio

For illustration let us suppose that *A*, *B*, and *C* are partners with the following balance sheet:

Sundry Assets	\$85,500 00	Notes Payable	\$10,000 00
		Accounts Payable	15,000 00
		<i>A</i> 's Loans	7,500 00
		<i>B</i> 's Loans	4,000 00
		<i>C</i> 's Loans	6,000 00
		<i>A</i> 's Capital	10,000 00
		<i>B</i> 's Capital	15,000 00
		<i>C</i> 's Capital	18,000 00
	<u>\$85,500 00</u>		<u>\$85,500 00</u>

Let us now suppose that assets are sold in January for 000 00 that cost \$65,000 00. Of this amount \$25,000 00 would be used to pay the notes and accounts payable, journal entries being made as indicated in paragraph 6, leaving \$19,000 00 to be used as a liquidating dividend. Since the losses reduced the total claims of partners to \$39,500 00, the \$19,000 00 dividend would reduce the balance of these claims to \$20,500 00. The \$19,000 00 must be so distributed that the balance of each claim would be equal or in the profit and loss sharing ratio, or \$6,833 33. Subtracting the desired balance from each of the partners' balances after liquidating losses are charged would give their respective shares in the distribution as shown in the table below.

If we now suppose the \$20,500 00 balance of assets to be sold in February for \$8,500 00, the \$12,000 00 of loss would be first charged to the partner claims equally. The balance of \$8,500 00 cash would then be distributed equally to the partners as shown in the table on the following page.

	<i>A</i>	<i>B</i>	<i>C</i>	<i>Total claims of partners</i>
Loan	\$ 7,500 00	\$ 4,000 00	\$ 6,000 00	\$17,500 00
Capital	10,000 00	15,000 00	18,000 00	43,000 00
Total	\$17,500 00	\$19,000 00	\$24,000 00	\$60,500 00
Liquidating Losses	7,000 00	7,000 00	7,000 00	21,000 00
Balance	\$10,500 00	\$12,000 00	\$17,000 00	\$39,500 00
Liquidating dividends	3,666 66	5,166 67	10,166 67	19,000 00
Balance	\$6,833 34	\$6,833 33	\$6,833 33	\$20,500 00
Liquidating Losses	4,000 00	4,000 00	4,000 00	12,000 00
Balance	\$2,833 34	\$2,833 33	\$2,833 33	\$8,500 00
Liquidating dividends	2,833 34	2,833 33	2,833 33	8,500 00

If the loan and capital claims had not been consolidated it would not have been safe to have distributed the \$19,000 00 liquidating dividend in January because future losses might more than cover the capitals of some of the partners. The \$19,000 00 would have paid all partners' loans and left \$1,500 00 for a dividend on capitals. This dividend, however, would not have sufficed to have reduced the balance of capitals to an equality. The January losses would have reduced *A*'s capital to \$3,000 00 and *C* would have been entitled to the \$1,500 00 dividend if it had been distributed. The February loss of \$4,000 00 would have more than wiped out *A*'s capital. Since the loan would have been paid *B* and *C* might not have been able to collect from *A* his share of the losses unless he were personally solvent. It would have, therefore, been improper to allow the January distribution. By the consolidation of the capital and loan interests the partners both protect their right and secure liquidating dividends at an earlier date.

**7. Reduction of the Capitals to the Profit and Loss Sharing Ratio.** — Pro rata liquidating dividends on capitals render difficult the distribution of losses on the profit and loss sharing ratio unless the capitals are themselves reduced to this particular ratio. Where there are periodic liquidating dividends on capitals, therefore, it is generally urged that the first dividend should be distributed so as to reduce the capitals to the profit and loss sharing ratio in so far as this may be possible. For

example, let us suppose that *A* and *B* are partners, with capitals of \$25,000 00 and \$35,000 00, respectively, and that they share profits and losses equally. Let us suppose, further, that they dispose of assets with a book value of \$30,000 00 for \$20,000 00, the proceeds to be applied first to the liquidation of accounts payable amounting to \$10,000 00. To record the transactions, the following journal entries would be made:

Cash	20,000 00	
Losses from Liquidation	10,000 00	
Sundry Assets		\$30,000 00
<i>A</i> 's Capital	5,000 00	
<i>B</i> 's Capital	5,000 00	
Losses from Liquidation		10,000 00
Accounts Payable	10,000 00	
Cash		10,000 00

By these entries the total capital has been reduced to \$50,000 00, while the total cash has been reduced to \$10,000 00. The distribution of this cash balance to the partners will reduce the total capital to the still lower figure of \$40,000 00. The distribution should be made, however, so as to bring the capital balances to the profit and loss sharing ratio. Since *A*'s capital is \$20,000 00, the remaining cash available for distribution must be applied to the reduction of *B*'s capital to the same amount. This is effected by the following journal entry:

<i>B</i> 's Capital	10,000 00	
Cash		10,000 00

By these entries, the liquidated assets have been fully distributed and the capital balances so adjusted that future liquidating dividends can be made on a pro rata basis without preventing a distribution of losses on the profit and loss sharing ratio, the two ratios being now one and the same.

**8. Overdraft of Capital.** — At any time that the losses in liquidation apportioned to a given partner exceed his loan, the amount of such overdraft is charged against his loan to the business if any. If there were no loan, or the overdraft exceeded the loan, the amount of the overdraft would be charged

to his personal account if he were solvent, and to the other partners in accordance with their profit and loss sharing ratio, if he were insolvent. When the capital and loans are combined for the purpose of liquidation, the loss apportioned to a particular partner might exceed the total of his interest, in which case the amount would be charged against his personal account if he were solvent and to the other partners if he were insolvent.

For example, suppose *A*, *B*, and *C* are equal partners with capitals of \$2,000 00, \$3,000 00, and \$5,000 00 respectively and loans of \$4,000 00, \$2,000 00, and \$3,000 00. The liabilities are \$25,000 00. Suppose the losses in liquidation are \$18,000 00, that is, the assets are sold for \$26,000 00. The following journal entry would show the facts:

1	Cash	26,000 00	
	Losses in Liquidation	18,000 00	
	Sundry Assets		14,000 00
2	<i>A</i> 's Interest	6,000 00	
	<i>B</i> 's Interest	6,000 00	
	<i>C</i> 's Interest	6,000 00	
	Losses in Liquidation		18,000 00

But the total interests of the partners would be as follows:

	<i>A</i>	<i>B</i>	<i>C</i>	Total
Loan	4,000 00	2,000 00	3,000 00	9,000 00
Capital	2,000 00	3,000 00	5,000 00	10,000 00
Total Interest	6,000 00	5,000 00	8,000 00	19,000 00

Since the total of *B*'s interest is \$1,000 00 less than the loss chargeable to him, it will be necessary to increase his interest by the following entry:

Cash	1,000 00
<i>B</i> 's Interest	1,000 00

This entry is made in case he is solvent and can furnish funds to meet the claim against him. The total interests would then be as follows:

	<i>A</i>	<i>B</i>	<i>C</i>	<i>Total</i>
Total Interest	6,000 00	5,000 00	8,000 00	19,000 00
Added Interest of <i>B</i>		1,000 00		1,000 00
Total Interest	6,000 00	6,000 00	8,000 00	20,000 00
Losses in Liquidation	6,000 00	6,000 00	6,000 00	18,000 00
	0 00	0 00	2,000 00	2,000 00

The total cash will now be \$27,000 00. The first distribution would be journalized as follows

1	Liabilities	25,000 00	
	Cash		25,000 00
2	<i>C</i> 's Interest	2,000 00	
	Cash		2,000 00

These two entries put into the table would show the closing out of the interests as follows

	<i>A</i>	<i>B</i>	<i>C</i>
Total Interests	\$	\$	2,000 00
Liquidating Dividends			2,000 00

Of course the last entry in the table belongs with the other items. It was separated for the purpose of analysis.

In the illustrations above the table is simply an abbreviated substitution for ledger accounts. In case the student understands the procedure better when the accounts are employed he may substitute these for the table. The table is a report form and not the ledger form of entering the data. It was used for brevity in the illustration on the assumption that the student would at the same time readily visualize the accounts to be set up in the ledger.

**9. Justice of Distributing Liquidation Losses on the Profit and Loss Sharing Ratio.** — The question may fairly be raised as to whether liquidation losses should be placed on the same basis as operating expenses and losses. It might be urged that since the capital balances represent the ownership interest of the partners in the assets, the losses from liquidation, which are essentially losses in these assets, should be borne on the basis of the relative ownership claims. While this view would have materially simplified the problems of liquidation, and

might have been more equitable than the view already set forth, it is not the view adopted by the common law. The profit and loss sharing ratio has been the dominant principle in the liquidation of partners' claims against the assets of the partnership, pro rata distribution on partners' loans and partners' capitals being made only to the extent to which this type of distribution does not prevent the charging of liquidation losses on the profit and loss sharing basis.

### PROBLEMS AND QUESTIONS

- 1 To what accounts are losses in liquidation charged?
- 2 Can you legally declare a liquidating dividend on capitals before paying all liabilities?
- 3 What is the order of priority among the liabilities?
- 4 Why is it impossible to give the loans from partners the priority over their capital claims to which the obligation is apparently entitled?
- 5 Is it possible to enforce the rule of charging losses in liquidation on the profit and loss sharing ratio, making the partners' loans chargeable for a deficit in capital, and at the same time give priority to the loans over the capital of the partners?
- 6 If the partners' loans are combined with their capitals for the purpose of liquidation, do the shares received by the partners differ in total from what the partners would receive if the loans and capitals were kept separate and at the same time liquidation were carried forward so that all losses would be chargeable to the partners' capital or to their loans in case of a capital deficit? Explain your answer fully.
- 7 A, B, and C are equal partners with capitals and loans as follows

	A	B	C
Loans	\$6,000 00	\$7,500 00	\$10,000 00
Capitals	12,500 00	15,000 00	20,000 00

The partnership owes \$10,000 00 to fully secured creditors and \$15,000 00 to unsecured creditors. Partner A is made the liquidator and is allowed 5 per cent of the proceeds of liquidation with the understanding that he is to be paid this commission by the other two partners. (In such cases the settlement is a private settlement and is not entered on the books.)

In the month of January assets costing \$45,000 00 were liquidated at \$30,000 00 cash. Make the proper distribution and the proper charges for January.

In February the balance of assets are sold at 50 cents on the dollar. Make the entries involved in winding up the partnership in February.

- 8 (a) X, Y, and Z are equal partners with the following interests

	X	Y	Z
Loans	\$2,000 00	\$4,000 00	\$6,000 00
Capital	6,000 00	8,000 00	10,000 00

They owe outside creditors \$30,000 00 They sell the total assets for 50 per cent of their book value X is solvent and can therefore be charged with any deficit for which his interest does not provide Make entries to wind up the partnership

(b) Solve the same problem on the assumption that X is insolvent and could not meet any deficit in his interest



## CHAPTER XXIV

### CORPORATE ORGANIZATION AND ACCOUNTING

**1. The Original Proprietary Interest.** — It has been set forth in preceding chapters that in the corporation the proprietary interest instead of being expressed in the dollar unit only, as in the partnership and individual business, is expressed in terms of share units of so many dollars per share. A stockholder will say that he owns ten shares of stock in the corporation, each share having a certain par or face value, such as \$100.00 or \$150.00. This original par value is intended by the various states which have authorized the organization of corporations to represent the number of dollars invested by the shareholder for each share owned. It does represent facts of this sort in some cases. But property is frequently transferred to the corporation for shares of stock and the states have not in many cases created efficient administrative machinery for carrying out the intent of the law. Hence the face value of the shares frequently does not signify even approximately the actual investment of the shareholder in the corporate assets. The journal entry, however, is generally made to give a "book value" to assets exchanged for corporate shares equal to the face value of the shares so issued. That is, the assets are generally entered as having a money value equal to the par value or face value of the shares for which they are exchanged.

**2. Shares without Par Value** — Since it has been found that the par or face value of shares is so often in excess of the sale value of the assets which have been exchanged for the shares, the original proprietary interest has been represented in some cases by shares without par value. If these shares were sold for cash by the corporation, the shareholders' capital would be credited for the amount paid instead of the nominal value appearing on the face of the shares. Another advantage

to be realized by the use of shares without par value is found in the escape from the statutes requiring that the money or property exchanged for shares of a corporation shall be at least equal in value to the par of the shares issued. When the shares have no par value it is clear that the shares may be exchanged for such money or property as the corporation may see fit to accept in exchange. The credit to capital and to the shareholders would be determined, however, by the valuation placed on the property exchanged for such shares.

**3. Surplus.** — The earnings of a corporation may be distributed to the stockholders or they may be accumulated into what is called a surplus reserve. When earnings are distributed they are always distributed pro rata, a dividend of a certain number of dollars for each share is declared from surplus and distributed on a certain date to the stockholders of record for the date in question. The profit and loss account is closed into a surplus account instead of being closed into a capital account as would be the case for the partnership or the individual business. Extraordinary profits or adjustments in the book value of assets are carried directly through the surplus instead of through profits and loss. The practice of the corporation in this respect is the same as that found to prevail for the partnership and the individual business.

**4. Liabilities of the Stockholders.** — The ordinary private corporation is liable to its creditors, who have a first claim against the total assets of the corporation. In case of insolvency, the proceeds of the sale of assets would be subject first to the claims of creditors. Any balance remaining after all creditors are fully paid is distributed pro rata to the shareholders, but the shareholders are not liable for the debts of the corporation except to the extent of their ownership interest in the corporation. If the corporation itself cannot pay its liabilities out of the assets turned over to it in exchange for the shares of the stockholders, the creditors have no other remedy, and must accept in settlement of their claim a pro rata distribution of the proceeds of liquidation of such assets as the corporation may own. In the case of the national banks

the stockholders are liable for an additional levy equal to the par value of the shares which they may hold, in case this amount is required to pay the outstanding liabilities of a bank. The immunity of the shareholders in the ordinary private corporation from additional levy to meet the liabilities of the corporation in case of insolvency is one of the chief characteristics of the corporation commonly relied upon to popularize subscriptions for corporate shares. Large amounts of money can be raised more readily by the corporation than by the partnership on this account.

**5. Classes of Stock** — The corporation may have only one class of stock or it may have several classes. The most common types of capital stock are common and preferred stocks. There are, however, several varieties of preferred shares, such as the ordinary preferred and the cumulative preferred. In the case of any type of preferred there may be a first preferred, a second preferred, etc. When there is only one class of stock, no stockholder has a claim which is to be preferred over that of any other stockholder. The preferred stockholders, however, ordinarily have a claim which is preferred to that of the common stockholder in the distribution of profits and in the distribution of the proceeds of the liquidation of assets. The provision under which the preferred stock is issued might set up, for example, the right to a dividend of 7 per cent on the par value of the shares from the earnings of any year, before the common stockholders would have any right to participate in the profits of the year in question. If the earnings were sufficient to pay the 7 per cent on the preferred stock and a dividend on the common stock in addition, the common shareholders might participate in the distribution of profits. Similarly, if the assets of the corporation are sold, the balance of the proceeds of the sale of the assets after paying the liabilities of the corporation would be available for distribution to the holders of preferred stock in an amount equal to the par value of such stock outstanding. The balance of the proceeds of liquidation in excess of the par value of the outstanding preferred stock would then be available for distribution to the holders of

common stock or to the holders of the second preferred shares in case such a class of shares existed. There is some variety in the rights of the holders of preferred stock. They might have a preference over the common stock only as to dividends, without preference as to assets. The holder of cumulative preferred stock would have the same rights as the holder of the preferred stock to the dividend distribution guaranteed as a prior claim over distribution to the holders of common stock, but the dividend of any particular year if unpaid would accumulate in succeeding years as a claim of the preferred shareholder which must be met prior to the distribution of any dividends to the holders of common stock. If the cumulative preferred dividends were 6 per cent and the corporation should be unable to pay this dividend in the first and second years of its operation, the cumulative claim of the cumulative preferred stockholders would be 18 per cent for the third year of the operation of the business. The corporation is, however, under obligation to pay the dividend to preferred stockholders only when the dividend is earned. It does not become a liability of the corporation in the sense that notes payable and accounts payable are liabilities. If the student desires to make a thorough study of the varieties of corporation stock issued against the corporate property, he is referred to the texts on corporation finance which are primarily concerned with such matters. The preferred stocks themselves may be classed as follows: (a) preferred stock, second preferred, etc., (b) cumulative preferred, second cumulative preferred, etc. The two types (a) and (b) may exist in the case of the same corporation. Moreover, either class (a) or class (b) may be preferred as to dividends without being preferred as to assets or vice versa. Either class may have the right to vote or it may not. Preferred shares may, in some cases, be allowed to share with the common stock additional dividends after their preferred claim has been met and the common shareholders have received certain specified distributions.

**6. Bonds.** — The corporation employs another device for raising funds to carry on its operations through the sale of

corporate bonds These bonds may be debenture bonds or mortgage bonds The debenture bonds are unsecured notes maturing in a certain number of years and bearing a designated rate of interest on the par value of the bonds First mortgage bonds are based upon a first mortgage against certain designated assets which must be sold to meet the claims of such bondholders for interest or principal on the corporate debt in case the corporation is not able to pay such obligations from the income derived from its operations The amount of the bonds issued may be limited to 50 per cent or 75 per cent, or to some designated fraction of the value of the mortgaged property The instrument under which the bonds are issued which describes the rights of the holders of the bonds and of the corporation, is called a "deed of trust" This deed of trust will ordinarily require the corporation to maintain the mortgaged property and carry out other provisions designed to protect the interests of the bondholders The bonds are commonly issued in denominations of \$100 00, \$500 00, \$1000 00, \$5000 00, or in amounts representing some multiple of \$100 00 The face value of the bonds will be the amount which the corporation promises to pay the bondholder on the date of maturity of the bonds If the corporation becomes insolvent at any time the proceeds of the sale of the mortgaged property must be devoted first to the payment of the bonds issued on the basis of the mortgage Any balance which might remain would be available to meet the claims of general creditors, such as those represented by the debenture bonds or ordinary notes and accounts of the corporation There may also be a second mortgage bond, which would be entitled to the balance of the proceeds of the liquidation or sale of mortgaged property after the liabilities to the first mortgage bondholders had been fully met If a second mortgage exists, the general creditors have no claim against the proceeds of the liquidation of the mortgaged property until the holders of the second mortgage bonds as well as those of the first mortgage bonds have been fully paid Another type of bonds which is important in accounting procedure is the sinking fund bond. The deed of

trust for such bonds requires the corporation to set aside each year a designated amount of money which is relied upon to accumulate to an amount equal to the face value of the bonds prior to the date of maturity. The money so set aside is commonly invested in securities which can be readily sold. The interest on such securities held in a sinking fund is accumulated in the fund on a compound interest basis. The deed of trust under which such bonds are issued designates not only the amount of the annual contribution which must be made to the sinking fund, but has provisions in regard to the type of assets which may be purchased with funds so accumulated.

**7. Charter and By-laws of the Corporation.** — Corporations are commonly organized under the provisions of the laws of some state, which places limitations upon the corporation as to its operations and as to the liabilities which it may assume. Three or more individuals wishing to organize a corporation must, therefore, commonly apply to the secretary of state for authority to do so. These individuals are required to state the purposes for which they wish to organize the corporation and to comply with other formalities in connection with their application before the secretary of state will issue a charter to the parties presenting application. When a charter has been secured and the capital stock has been subscribed for and paid in in accordance with the laws of the state under which the corporation is organized, the stockholders are then called together for the purpose of perfecting the organization of the business which is provided for in the charter. A set of by-laws is ordinarily adopted, which designates the offices of the corporation and the rights and duties attached to the respective offices created. The charter also commonly provides for a board of directors to whom the stockholders delegate general managerial authority. The board of directors is also entrusted with the duty of employing officers to carry on the routine operations of the corporation. The directors are then expected to meet from time to time, to pass on the proposals made by the officers of the corporation in regard to the conduct of its business. The officers of the corporation are required to carry out the instruc-

tions of the board of directors and to carry on the business in accordance with the by-laws of the corporation and the instructions of the board of directors. The stockholders themselves generally have an annual meeting for the purpose of deciding such general questions of management as may not be delegated to the board of directors. Moreover, the stockholders will yearly elect additional directors to fill the places of those directors whose terms may have expired. For a fuller description of the nature and content of the by-laws of the corporation, the student is referred to the texts on corporation finance.

**8. Distribution of Profits.** — The stockholders commonly delegate to the directors of the corporation the determination of the amount of profits which are to be distributed from time to time to the stockholders. If it should appear that the directors are withholding profits from distribution unnecessarily, the aggrieved stockholders might apply to a court of equity for an injunction which would require the directors to distribute the profits to which the stockholders might be entitled. Wide discretion is, however, commonly given to the directors in determining whether the interests of the corporation require the retention of profits for an expansion of the operations of the corporation.

**9. Minute Book.** — The by-laws of the corporation would commonly require that a minute book be kept, in which a full record is made of all the resolutions and proceedings of the board of directors. The record set forth in this minute book is the authority upon which the officers of the corporation proceed in carrying forward the business of the corporation.

**10. Nature of the Corporate Organization.** It will appear from the previous description of the characteristics of the corporation that it is a highly developed type of business organization designed primarily for the raising of adequate funds for carrying forward and expanding the operations of a business. The various classes of claims created against the assets of the corporation are designed to meet the requirements and preferences of the various types of investors who may have money available for business investments. If the investor

desires to have authority to determine the general policies of the business with which he is connected and at the same time to share in the profits of the enterprise he will invest in corporate stock. If he is a holder of common stock he will, in general, have a vote in the election of the board of directors and he will have certain rights in regard to inquiry into the operations of the business with which he is associated and he will also have the right to a share in the profits of the business. If he is a holder of preferred stock, he may have a vote in the election of directors and certain rights in regard to directing the affairs of the business, or he may be deprived of this right by the articles under which the preferred stock is issued. In any case, however, his investment will be attended with less risk than that connected with the ownership of common stock. There will be less risk still connected with the ownership of bonds, and the safest bond, in general, is the first mortgage bond. The investor who desires a safe investment requiring little attention on his part will commonly select a high class first mortgage. This variety of investment opportunity created by the corporation makes it the favorite device for the financing of business enterprise on a large scale.

**11. The Relation of Corporate Organization to Accounting Procedure** — The accountant could not intelligently proceed to set up a schedule of accounts until he had first familiarized himself with the types of securities authorized by the charter, by-laws, and directors of the corporation. Moreover, the auditor would need to familiarize himself with the provisions of all deeds of trust and of all instruments under which the various types of liabilities and shares are issued. He would need to know these facts both from the standpoint of determining what information should be recorded in the corporate books and also for the purpose of determining whether the officers and directors of the corporation were carrying on its operations in accordance with the provisions of these instruments designed to protect the various investors interested in the property. The accountant must not only be familiar with the contents of all the instruments creating liabilities and proprietary claims,



but he must also be familiar with all actions taken by the board of directors as recorded in the minute book of the corporation. The proceedings of the directors may at any time require that certain accounts be set up or that certain records be initiated which have not heretofore been found in the accounts of the corporation.

**12. Corporate Accounting.** — The income, expense, and asset accounts are similar to the accounts under these various headings in the partnership and individual business of a similar size and character. The peculiar features of corporate accounting arise in connection with the proprietary and liability interests. These interests are complex and the officers and directors need to be fully acquainted at all times with the character and amount of liabilities to holders of securities of every class. They also need to know the obligations to the corporation which the holders of subscription claims and corporate securities may have. The corporation reports of income and expense and the classification of assets as found in corporation reports present no special characteristics as compared with those of the types of business which have been so far considered.

**13. The Corporate Balance Sheet.** — The balance sheet of the corporation, which is presented in outline below, shows in summarized form how the facts of corporate liabilities and proprietorship are presented for the purpose of an operating concern. The corporate balance sheet presents the financial situation of the corporation. The ratios of current assets to current liabilities, net worth to fixed assets, etc., have a significance similar to that already pointed out in a preceding chapter. The caption of fixed liabilities has far more importance, however, in the corporate balance sheet than it has in the other forms of organization because this type of investment interest is larger as compared with proprietary investments than for the partnership and the individual business. There is present the temptation to issue a large total of fixed liabilities in the form of bonds and mortgages as compared with the total proprietorship investment. The holders of the fixed liabilities

commonly have the right to displace the proprietorship in the management of the corporation in case it does not prove to be able to pay the interest charges and also pay the liabilities when they fall due. The holders of bonds and mortgages ordinarily get control through the appointment of a receiver, who operates the property with a view to meeting their claims, or the receiver may undertake to sell the property with the view to paying the claims of the holders of liability interests. If the court appoints the receiver on the application of the bond or mortgage holders, the receiver is required to act on instructions from the court in his operation or sale of the property. If the property is sold for no more than enough to pay the obligations of the corporation to its creditors the proprietary interest loses its entire investment.

In organizing the corporation, therefore, the proprietors should be cautious not to create fixed interest charges so large in amount that the total income of the corporation may in the years of dull business be insufficient to pay them. The margin of total income over the amount required to meet these guaranteed claims should be so large that there will be little chance for the proprietary interest to lose its investment. The ratio of fixed liabilities to the proprietary interest should be smallest in those lines of industries in which the total income fluctuates widely from year to year. A street railway's income does not generally fluctuate so widely as the income of the industrial corporations. It is not uncommon for the street railway to be constructed mainly from the proceeds of bond sales. The industrial organized on such a basis would be in an unstable position both from the standpoint of the creditors and of the proprietary interest.

A similar analysis may be made from the standpoint of the relation of the appropriate amount of investment of the common stockholders as compared with that of the holders of the preferred shares. If one interested in such analysis had a large number of corporate statements in each industry, some conclusion might be reached as to the prevailing ratio of fixed liabilities to proprietorship in the respective industries.

The sale value of the proprietary interest may be, at the time of the organization of the business, much less than its nominal or face value. The full analysis of the actual investment of the proprietors as compared with the nominal value of the shares may be secured in the first instance by a fair valuation of the assets turned over to the corporation in exchange for the shares as shown by the journal entries involved in the issue of the corporate shares. The additional funds invested from year to year would generally be shown by the corporate surplus if no further shares were issued.

For a detailed analysis of the factors connected with the organization and capitalization of the corporation the student is referred to the texts on corporation finance.

The following balance sheet outline shows the more staple items and groups of items found in the corporate balance sheet.

ILLUSTRATION NO 27  
VALLEY FURNITURE COMPANY

COMPARATIVE BALANCE SHEET, DECEMBER 31, 19—

(The per cents other than increase per cents are of total assets or total liabilities)

	<i>Assets</i>			
	1918	1917	Increase	Inc %
Current Assets				
Cash				
Notes Receivable				
Accounts Receivable				
Merchandise Inventory				
Accrued Inc Not Due				
Interest .				
Rent . .				
Totals .				
Working Assets				
Supplies Inventory				
Deferred Expense				
Insurance				
Ext Repairs				
Advances to Agents				
Totals				
Investment of Reserves				
Bond Sinking Fund				
Replacement Fund				
Totals				
Permanent Investments				
Securities in A B C Co				
Advances to G H Co				
Totals .				
Fixed Assets:				
Land .				
Buildings .				
Furniture and Fixtures				..
Plant . . . .				.
Equipment . . . .				. .
Goodwill . . . .				
Totals . . . . .				
Grand Total Assets				

<i>Liabilities</i>				
	1918	1917	Increase	Inc %
Current Liabilities				
Notes Payable				
Accounts Payable				
Accrued Accts Payable				
Interest .				
Rent				
Taxes .				
Totals				
Deferred Income				
Royalties				
Rent .				
Totals				
Fixed Liabilities				
Bonds				
Mortgages				
Notes (Long term)				
Totals				
Proprietorship				
Capital Stock, Common				
Capital Stock, Preferred				
Appropriated Surplus				
Surplus				
Totals				
Grand Total Liabilities				

### QUESTIONS AND PROBLEMS

- 1 In the corporation how is the original proprietary interest created and designated?
- 2 What is meant by par value?
- 3 What are the advantages of shares without par value? What credits to capital would arise out of their sale?
- 4 What becomes of the net profits of the corporation?
- 5 (a) Describe the nature of corporation dividends (b) Who generally has authority to declare them? (c) From what account are they commonly declared?

6 (a) What are the liabilities of the shareholders of the ordinary private corporation? (b) Of the national bank shareholders?

7 (a) What are the classes of corporate shares? (b) Describe the rights generally belonging to the various types of shares

8 Describe the nature of the bond liabilities and the process of their issue

9 (a) What are the classes of bonds? (b) What are the rights of the owners of these several classes?

10 What instruments determine the rights and duties of directors, officers, and stockholders?

12 What is the content of the minute book?

13 What are generally the duties of the directors?

14 Compare the corporate balance sheet with that of the individual business and that of the partnership

## CHAPTER XXV

### CAPITAL STOCK ACCOUNTS AND THE ISSUE OF CORPORATE SHARES

**1. Issue of Capital Stock.** — The private corporations are in general organized under the laws of the several states. Each state makes certain requirements in regard to reports, in regard to the maximum liability of the corporation and the duties of shareholders, which must be complied with by all corporations organizing under the laws of the state in question. The general corporation laws of some states are more favorable to a corporation than those of other states. It is consequently advisable before making application to the secretary of state for articles of incorporation to become acquainted with the corporation laws of the state in question. After these preliminaries have been carried out, three or more individuals make application for the right to incorporate, stating the character of business to be done, the amount of capital which is to be authorized, and stating such other facts as may be required of prospective incorporators by the laws of the state under which the corporation is to be organized. When the charter has been secured, and the preliminaries in regard to the formation of the corporation have been complied with by the incorporators, a prospectus is commonly issued indicating to prospective subscribers for corporate shares the type of business to be carried on and the rights of shareholders in the corporation. A regular blank form is generally provided on which a subscriber makes his subscription for a certain number of shares of stock and promises to make payment for the same as required by the subscription blank in question. A list of subscribers is thus developed and this list of subscribers is the basis of setting up a general ledger account with subscribers. At the same time a capital stock account is set up on the general ledger, subsidiary

ledgers showing in detail the accounts with the particular subscribers and particular shareholders

**2. Entry of Authorized Shares.** -- When the capital stock of the corporation is duly authorized, it is common to make a general journal entry charging *unissued stock* or *unsubscribed stock* and crediting *capital stock* for the amount of capital authorized. For example, if \$500,000 00 of capital stock were authorized and no subscriptions had been taken, the journal entry representing this fact would be as follows

Unissued Stock	500,000 00	
Capital Stock		500,000 00
Entry of authorized capital		

An alternative entry here would be

Unsubscribed Stock	500,000 00	
Capital Stock		500,000 00

**3. Entry of Capital Stock Subscriptions.** -- Let us suppose in the case above cited that the following list of subscribers is made up from the subscription blanks

John Smith	2500 shares
John Quade	1250 shares
Henry Post	1000 shares

Let us further suppose that this subscription is accompanied by a cash payment of 10 per cent on the amount subscribed. The journal entry involved in entering these subscriptions might be made according to several different methods. Perhaps the most common journal entry would be the following:

Subscribers	475,000 00	
John Smith	250,000 00	
John Quade	125,000 00	
Henry Post	100,000 00	
Unissued Stock		475,000 00

An alternative entry which might be substituted along with the alternative entry in the preceding paragraph would be as follows:



Subscribers		475,000 00
John Smith	250,000 00	
John Quade	125,000 00	
Henry Post	100,000 00	
Unsubscribed Stock		475,000 00

At the same time it would be necessary to make a second entry covering the cash received, as follows

Cash		47 500 00
Subscribers		47,500 00
John Smith	25,000 00	
John Quade	12,500 00	
Henry Post	10 000 00	

Other payments of the subscribers under the requirements on their subscription blanks would be entered in the same fashion as the 10 per cent paid at the time of the original subscription. In case property were turned over to the corporation by certain shareholders in payment for their subscriptions, the property so transferred would be charged, and the subscription account in question credited. It might be true that certain subscribers who exchanged property for shares would receive fully paid stock covering the valuation placed on the property received. If it be supposed that John Quade were allowed \$10,000 00 for patent rights, he might be given paid-up shares for \$10,000 00, or the valuation placed on his patent rights transferred to the corporation might be credited to the subscription account as follows

Patent Rights	10,000 00	
Subscribers		10,000 00
(John Quade)		
Crediting John Quade on his subscription account for patent rights transferred to the corporation		

**4. Definition of Unissued Capital and Capital Stock Accounts.** — If the entry be made as provided for in the preceding paragraph, the unissued stock account would be described as follows:

## UNISSUED STOCK

Total Authorized Stock Unissued    Total Capital Stock Subscribed  
 Balance of Unsubscribed Stock

The unsubscribed stock referred to as an alternative entry would be described in the same way. The two accounts mean the same but the alternative account is more satisfactory as descriptive of the item.

The capital stock account would be described as follows

## CAPITAL STOCK

Reductions in Capital Stock            Total Capital Authorized  
 Balance Authorized

Under this plan the capital stock account in the case of the corporation above described would appear on the liability side of the balance sheet as follows

Capital Stock	\$500,000 00	
Less Unissued Stock (Or Unsubscribed)	25 000 00	\$475,000 00

Objection is sometimes made to the fact that stock is represented as corporation capital before the subscriptions are fully paid. The shareholders do not commonly have even the voting right until the subscriptions have been fully paid. Moreover, it is contended that the capital stock account with the deductions of unissued shares should be so stated as to show the proprietary investment made in connection with the organization of the corporation. On the other hand, it is contended that the subscriptions of the prospective shareholders represent for the time being their investment in the capital of the corporation and that the balance of the subscribers' account will at all times show the balance to be paid on subscriptions and that hence all the facts are fully set forth that

would be needed by any creditor of the corporation, by reference to the balance of the capital stock account after the deduction of the unissued or unsubscribed stock

It is preferred, however, by some that a different definition shall be given to unissued capital stock and that another account shall be introduced called *capital stock subscriptions*. If this second method of opening entry were adopted the transactions above described would be entered as follows

(a) Unissued Capital Stock	500,000 00	
Capital Stock		500,000 00
(b) Subscribers	475,000 00	
(Detail list of subscribers as above)		
Capital Stock Subscriptions		475,000 00
(c) Cash	47,500 00	
Subscribers		47,500 00
(Detail credit to particular subscribers)		

Finally when all subscriptions to the \$475,000 00 of capital stock have been fully paid, an entry would be made as follows.

(d) Capital Stock Subscriptions	475,000 00	
Unissued Capital Stock		475,000 00

This set of entries involved in entering subscriptions is more accurate in some particulars and conveys on the face of a balance sheet during the period when subscriptions are being paid more information than the first method referred to above. In this case the balance of the unissued capital stock account would always show the amount of stock unissued (not outstanding). The capital stock, less unissued stock, as it would appear on the balance sheet of the corporation, would then show the capital stock actually outstanding. It is fair to raise the question, however, whether it is more desirable to show during this period the actual stock outstanding or whether it would be preferable to show the original proprietary interest as the capital stock for which subscriptions had been received.

**5. Capital Stock as a Controlling Account.** — If it is desired to make the capital stock account a controlling account over the capital stock ledger, it would be necessary to make no

credits to capital stock until shares are fully paid and issued. On the basis of a program of this character, the entries described above would be made as follows:

(a) Subscribers	475,000 00	
(List in detail as above)		
Capital Stock Subscriptions		475,000 00
(b) Cash	47,500 00	
Subscribers		47,500 00
(Subscription credits in detail)		

When the \$475,000 00 of stock has been fully paid the subscribers' account will be closed and all of the individual subscription accounts will also be closed. The entry under such circumstances would be as follows:

(a) Capital Stock Subscriptions	475,000 00	
Capital Stock		475,000 00
(Credit also individual accounts of each shareholder)		

Prior to the issue of capital stock the account of *capital stock subscriptions* will represent the proprietary interest of the stockholders in the enterprise.

If the subscriptions are fully paid at the time of opening the books of the corporation, it is then unnecessary to open accounts with subscribers or to set up a subscribers' account. If the subscriptions are paid in cash at the time of opening the books the capital stock would be issued and the journal entry would be as follows:

Cash	475,000 00	
Capital Stock		475,000 00
(Credit also individual accounts of each shareholder)		

If, however, it were desired to credit capital stock with the total of the authorized issue instead of the amount issued, the journal entry would be made as follows:

Unissued Stock	25,000 00	
Cash	475,000 00	
Capital Stock		500,000 00

With the last entry the capital stock account would not be a controlling account over the stock ledger, although reference to

unissued stock would readily show the amount of stock outstanding, which could be checked against the detail stock ledger accounts to see whether the capital stock account in the general ledger was in accord with the stock ledger and other entries affecting capital stock

**6. Installment Records** — Even though subscription to capital stock is paid in installments, it does not seem necessary to set up each installment as a separate subscription account. The payment of installment No. 1 can be credited to the subscription account as Installment No. 1, likewise, the payment of installment No. 2 can be credited to the subscription account as Installment No. 2. This could be readily accomplished by columns in the cash journal headed Installment No. 1 and Installment No. 2, so that the total received could be carried from the cash journal as one item of credit to the subscribers' account with a ledger memorandum showing the amount collected on Installment No. 1. Likewise the credits to the individual accounts of subscribers in the subscription ledger might show in the memorandum that the credit was for Installment 1, 2, or 3.

However, it is sometimes desired to set up a separate account in the general ledger for each installment and at the same time to charge the subscribers with the special installments so that for each subscriber there would be as many subscription accounts as there are installments and as many general subscription accounts in the general ledger as there are installments. Let us suppose that the \$475,000.00 subscriptions referred to above were in three installments of 10 per cent, 45 per cent, and 45 per cent. In that case the subscribers' account might be closed out into the respective installment accounts by the following journal entry:

Installment #1	47,500.00	
Installment #2	213,750.00	
Installment #3	213,750.00	
Subscribers		475,000.00

In connection with each charge to the Installment Accounts the detail charges to individual subscribers should be made

The individual accounts would in each case be divided into three in the same proportion as that indicated for the total of subscriptions. If \$47,500 00 of cash were received on installment No. 1 the journal entry showing the receipt would be as follows:

Cash	47,500 00	
Installment "1"		47,500 00
Credits to the subsidiary accounts would be made here also		

Individual installment accounts would likewise be credited for the first installment.

**7 Exchange of Property for Stock** - It happens frequently that a corporation takes over the property of some other business, assuming its liabilities and exchanging shares to the proprietors of the old business for their interest. For example, the ABC Corporation might issue shares to D and C, who are partners in a firm with the following balance sheet:

### D & C FIRM

BALANCE SHEET DECEMBER 31, 1919

<i>Assets</i>		
Current Assets		
Cash	\$10,000 00	
Notes Receivable	4,000 00	
Accounts Receivable	17,500 00	
Merchandise Inventory	<u>15,000 00</u>	\$46,500 00
Fixed Assets		
Fixtures		5,000 00
Total Assets		<u>\$51,500 00</u>
<i>Liabilities</i>		
Current Liabilities		
Notes Payable	\$7,500 00	
Accounts Payable	<u>12,000 00</u>	\$19,500 00
Proprietorship		
C's Capital	20,000 00	
D's Capital	<u>12,000 00</u>	<u>32,000 00</u>
Total Liabilities		<u>\$51,500 00</u>

It will be seen that the proprietary interest in the partnership amounted to \$32,000.00. If it were desired by the corporation to take over the assets and liabilities at their book valuation, then \$32,000.00 of the capital stock of the ABC Corporation would be issued to C and D for their proprietary interest, \$20,000.00 to C and \$12,000.00 to D. In some instances, however, the corporation might insist on a reduction in the book value of some of the asset items, accounts receivable, merchandise inventory, or fixed assets might be reduced and the proprietary interest in the partnership would be correspondingly reduced. These adjustments would be made in the books of the old firm prior to the transfer to the corporation. The corporation would take the assets over at their readjusted value and would exchange capital shares to the partnership in amount indicated by the readjusted valuation of their partnership interest. If the capital stock were issued in exchange for the proprietary interest, the following journal entry might serve to incorporate the business in the books of the corporation:

Cash	10,000 00	
Notes Receivable	4,000 00	
Accounts Receivable	17,500 00	
Merchandise Inventory	15,000 00	
Fixtures	5,000 00	
Notes Payable		7,500 00
Accounts Payable		12,000 00
Capital Stock		32,000 00
C's Capital	20,000 00	
D's Capital	12,000 00	

If, however, the books of the corporation had been opened with subscription accounts and some of the subscribers were expected to pay for their shares in installments, then the partners in the firm taken over would also be represented as subscribers by means of the following journal entry:

Subscribers	32,000 00	
Capital Stock Subscriptions		32,000 00

Then the taking over of the assets and liabilities would be recorded by the following journal entry:

Cash	10,000 00	
Notes Receivable	4,000 00	
Accounts Receivable	17,500 00	
Merchandise Inventory	15,000 00	
Fixtures	5,000 00	
Notes Payable		7,500 00
Accounts Payable		12,000 00
Subscribers		32,000 00
C,	20,000 00	
D,	12,000 00	

After this entry is made and the subscriptions of C and D are fully paid the following journal entry would be made

Capital Stock Subscriptions	32,000 00	
Capital Stock		32,000 00

The student will readily see how these items would appear on the books of the corporation if any one of the plans referred to in the preceding paragraphs were adopted for the opening entries

Accountants frequently insist on a still further analysis for indicating the opening entries of the corporation, showing in separate entries the assets taken over, the liabilities assumed, and the transfer of the proprietary interest. The detail would require journal entries as follows <sup>1</sup>

(a) Cash	10,000 00	
Notes Receivable	4,000 00	
Accounts Receivable	17,500 00	
Merchandise Inventory	15,000 00	
Fixtures	5,000 00	
C and D, vendors		51,500 00
Entries of the purchase from		
C and D of the assets of		
the partnership		
(b) C and D, vendors	19,500 00	
Notes Receivable		7,500 00
Accounts Payable		12,000 00
Entry showing the assump-		
tion of the partnership		
liabilities by the corpora-		
tion		
(c) C and D, vendors	32,000 00	
Capital Stock		32,000 00

<sup>1</sup> Again, if it were desired to enter C and D as subscribers this entry would be made before any of the entries recorded above



## CHAPTER XXVI

### CHANGING TO THE CORPORATE FORM OF ORGANIZATION

**1. Transferring Entries on the Old Books.** — If an individual or partnership business is changed to the corporate form and the operating records used for the old business are continued, the entries required to indicate the change will be simple. Suppose the partners A and B decide to incorporate with a capital stock of \$10,000 00 in excess of their total capital. A's capital is \$40,000 00 and B's is \$50,000 00, while the authorized capital of the corporation is \$100,000 00. Since the assets less the liabilities are \$90,000 00, it is necessary either to start with a deficit or to introduce an item of goodwill. If profits and losses were divided equally in the old business, the \$10,000 00 of goodwill would be divided equally between A and B by the following journal entry

Goodwill	10 000 00	
A's Capital		5,000 00
B's Capital		5 000 00
Goodwill placed on the partnership books as set up in accordance with the purchase price placed on the assets by the corporation which took over the assets		

After the goodwill has been placed on the books it is then necessary to close out the partnership accounts and open the capital stock account by the following journal entry

A's Capital	45,000 00	
B's Capital	55,000 00	
Capital Stock		100 000 00
(Capital Stock to A	45,000 00)	
(Capital Stock to B	55,000 00)	

The memorandum entry below the capital stock entries would serve to open the subsidiary stock ledger accounts for the individual stockholders if such a ledger were kept.

**2. Transferring to a New Set of Books.** — Let us take first the simple case when the partnership books are to be closed preparatory to forming the corporation and a new set of books is to be opened. Suppose the AB partnership has the following balance sheet

## BALANCE SHEET OF AB PARTNERSHIP

<i>Assets</i>		<i>Liabilities</i>	
Cash	\$10,000 00	Notes Payable	\$7,500 00
Notes Receivable	4 000 00	Accounts Payable	12,000 00
Accounts Receivable	17,500 00	Capital Stock	32,000 00
Merchandise Inventory	15 000 00		
Fixtures	5,000 00		
	1 500 00		1,500 00

The following journal entries would be sufficient to make the transfer

(a) AB Corporation	51,500 00	
Cash		10 000 00
Notes Receivable		4,000 00
Accounts Receivable		17,500 00
Merchandise Inventory		15,000 00
Fixtures		5,000 00

Transfer of the assets of the partnership to the AB Corporation

(b) Notes Payable	7,500 00	
Accounts Payable	12,000 00	
AB Corporation		19,500 00

The AB Corporation assumes the definite liabilities

To represent the fact that the partners transfer their capital interests in the partnership to the corporation the following entry may be made

(c) A, Capital	20,000 00	
B, Capital	12,000 00	
AB Corporation		32,000 00

Partners' capitals are transferred to the Corporation

If it is desired to show on the books what the partners received for their capital, this can be indicated as follows:

(d) Corporation Stock	32,000 00	
AB Corporation		32,000 00
Stock of the Corporation		
received for distribution		
to partners		
(e) A, Capital	20,000 00	
B, Capital	10,000 00	
Corporation Stock		32,000 00
Corporation stock received		
by partners in exchange		
for their capital interests		

If entries (d) and (e) are used, they take the place of the (c) form of entry. The two latter entries seem preferable because they make the picture more complete. If any adjusting entries were required in connection with the transfer, those would be made as in paragraph 1 above, before the final closing entries are made.

**3. Opening the Corporation Books.** — All of the necessary accounts for the corporation books would be opened by the following journal entry:

(a) Opening Entries of AB Corporation		
Cash	10 000 00	
Notes Receivable	4 000 00	
Accounts Receivable	17,500 00	
Merchandise Inventory	15,000 00	
Fixtures	5,000 00	
Notes Payable		7,500 00
Accounts Payable		12,000 00
Capital Stock		32,000 00
(A, Capital Stock 20,000 00)		
(B, Capital Stock 12,000 00)		

The corporation purchases the ownership interest of A and B, partners, by an issue of \$32,000 00 of capital stock, takes over the assets of the partnership, and assumes the liabilities.

The memorandum of this journal entry refers to several steps or aspects of this transfer. The accountants generally advocate the portrayal of these steps in more detail by distinct journal entries. If this is done, the opening entries above would be accomplished on the books by the following journal entries.

(b) Opening Entries of AB Corporation.

Subscribers	32,000 00	
(A, Subscriber 20,000 00)		
(B, Subscriber 12,000 00)		
Capital Stock		32,000 00
Cash	10,000 00	
Notes Receivable	4,000 00	
Accounts Receivable	17,500 00	
Merchandise Inventory	15,000 00	
Fixtures	5,000 00	
Notes Payable		7,500 00
Accounts Payable		12,000 00
Subscribers		32,000 00
(A, Subscription 20,000 00)		
(B, Subscription 12,000 00)		

The corporation takes over the assets and assumes the definite liabilities of A and B, partners, crediting their subscription accounts with the net assets

If one desired to make the capital stock account a controlling account over the subsidiary stock ledger the style of opening entry shown on the following page would be used:

## (c) Opening Entries of AB Corporation

Subscribers	32,000 00	
A, Subscriber	20,000 00	
B, Subscriber	12,000 00	
Capital Stock Subscriptions		32,000 00
Cash	10,000 00	
Notes Receivable	4,000 00	
Accounts Receivable	17,500 00	
Merchandise Inventory	15,000 00	
Fixtures	5,000 00	
Notes Payable		7,500 00
Accounts Payable		12,000 00
Subscribers		32,000 00
(A, Subscription 20,000 00)		
(B, Subscription 12,000 00)		
Corporation takes over the assets and assumes the definite liabilities of A and B, partners, crediting their subscription accounts with the net assets		
Capital Stock Subscriptions	32,000 00	
Capital Stock		32,000 00
(A, Capital Stock, 20,000 00)		
(B, Capital Stock 12 000 00)		
Capital Stock is issued covering paid up subscriptions		

The steps set forth in the three entries above are (a) subscription to the capital stock by the partners, (b) the transfer of their property in payment of their subscription, and (c) the issue of stock covering the paid up subscriptions. In this form of entry the subscribers' account is a general ledger account controlling the subsidiary subscriber accounts in the subscription ledger. The capital stock account is a general ledger account controlling the capital accounts of the stockholders in the stock ledger. The transfers of stock, however, do not affect the balance of stock outstanding. It is not, therefore, necessary to provide for the postings of the total transfers to the controlling account. The general ledger account is affected only by the original issue of stock and the cancellation of stock.

Neither of the forms of opening entries used above shows un-

issued stock. If it be supposed in the above case that there is \$8,000 00 of unissued stock, this may be shown on the books by the following form of opening entry

(d) Opening Entries of AB Corporation

Unissued (or Unsub-		
scribed) Stock	40,000 00	
Capital Stock		40,000 00

Entering the authorized capital stock

Subscribers	32,000 00
-------------	-----------

(A, Subscriber 20,000 00)

(B, Subscriber 12 000 00)

Unissued (or Unsub-		
scribed) Stock	32,000 00	

A and B subscribe for \$32,000 00 of capital stock

Cash	10,000 00	
Notes Receivable	4,000 00	
Accounts Receivable	17,500 00	
Merchandise Inventory	15,000 00	
Fixtures	5,000 00	
Notes Payable		7,500 00
Accounts Payable		12,000 00
Subscribers		32,000 00
(A, Subscription 20,000 00)		
(B, Subscription 12 000 00)		

The corporation takes over the assets and assumes the definite liabilities of A and B, partners, crediting their subscription accounts with the net assets

The capital item on the balance sheet would then appear as follows

Capital Stock	\$40,000 00	
Less Unissued (Unsubscribed)	8,000 00	\$32,000 00

If it were desired to make the proprietary interest appear as the actual capital stock outstanding rather than the subscribed capital the form of opening entry would be as follows:

## (e) Opening Entries of AB Corporation

Unissued Stock	40,000 00	
Capital Stock		40,000 00
Entering the authorized capital stock		

Subscribers	32,000 00	
A, Subscriber	20,000 00	
B, Subscriber	12,000 00	
Stock Subscriptions		32,000 00
A and B subscribe for \$32,000 00 of capital stock		

Cash	10,000 00	
Notes Receivable	4,000 00	
Accounts Receivable	17,500 00	
Merchandise Inventory	15 000 00	
Fixtures	5,000 00	
Notes Payable		7 500 00
Accounts Payable		12 000 00
Subscribers		32,000 00
(A, Subscription 20 000 00)		
(B, Subscription 12 000 00)		

The corporation takes over the assets and assumes the definite liabilities of A and B, partners, crediting their subscription accounts with the net assets

The final entry would then be as follows

Stock Subscriptions	32,000 00	
Unissued Stock		32,000 00
Issue of certificates covering paid up subscriptions		

The stock subscription account would then be closed, the subscribers' account would then be closed, and the unissued stock account would have a balance of \$8,000 00. An objection sometimes raised to this form of entry is that the capital stock account would show a balance of the authorized capital instead of the amount of stock issued and outstanding. This difficulty may be obviated by the following form of statement of capital stock in the balance sheet:

Capital Stock	\$40,000 00
Less Unissued Stock	8,000 00

Capital Stock Outstanding \$32,000 00

The liability to stockholders is then represented as \$32,000.00 on the amount of stock issued

The form of opening entry referred to in the parenthesis after the unissued capital stock item above would be as follows:

(f) Unsubscribed Stock 40,000 00  
       Capital Stock 40,000 00  
       The AB Corporation authorizes \$40,000 00  
       capital stock

Subscribers 32,000 00  
   (A, Subscriber 20,000 00)  
   (B, Subscriber 12,000 00)  
       Unsubscribed Stock 32,000 00  
   A and B subscribe for \$32,000 00 of capital  
       stock

Cash 10,000 00  
 Notes Receivable 4,000 00  
 Accounts Receivable 17,500 00  
 Merchandise Inventory 15,000 00  
 Fixtures 5,000 00  
   Notes Payable 7,500 00  
   Accounts Payable 12,000 00  
   Subscribers 32,000 00  
     (A, Subscriber 20,000 00)  
     (B, Subscriber 12,000 00)

The corporation takes over the assets and assumes the outside liabilities of A and B, partners, crediting their subscription accounts with the net assets

When this form of entry is used, the capital stock statement in the balance sheet would be made as follows

Capital Stock	\$40,000 00	
Less Unsubscribed Stock	8,000 00	\$32,000 00

The unsubscribed stock and the unissued stock are represented above by the same totals, but this would not be the case if part



of the subscribed stock had not been fully paid. The total of unissued stock would exceed the total of unsubscribed stock.

This form of entry is in substance the same as the first one (a) used above with the exception that the word *unsubscribed* is used instead of the word *unissued*.

There are other forms of opening entries sometimes referred to in the accounting texts. The capital stock account is not strictly a controlling account in the last two forms of opening entries used above, because the item includes all capital stock authorized while only the capital stock issued would be recorded in the stock ledger. The stock ledger would then be a memorandum ledger. Its accuracy could be readily tested, however, by a comparison in one instance with capital stock less unissued stock, and in the other instance by an examination of the subscribers' account and the unsubscribed stock account. No unsubscribed stock would be issued. No subscribed stock would be issued until it was fully paid.

If the (b) form of opening entries were used, the record of authorized and unsubscribed stock would be found in the minute book. It would also be significant as a memorandum in connection with the balance sheet. This form would then be entirely satisfactory and would yield all needed information. Forms (d) and (e) insert this memorandum information in the journal entries.

In opening the corporation books the opening entries should be made and posted before the entry of the regular transactions begins. The remainder of the accounting problems of the private corporations are substantially the same as those of any other kind of business organization. The voucher record is used frequently with the books of the corporation, but it may be used either with an individual enterprise or with a partnership if the size of the business justifies it.

**4. Forfeited Stock.** — In some states a subscriber is not allowed to forfeit a stock after he has subscribed for it. The corporation and its creditors hold a claim against the subscriber for the amount of his subscription even if the total amount is not paid into the corporate treasury.

In other states the corporation may require the subscriber to forfeit his stock in case of failure to pay the subscription installments. Under such circumstances the corporation would generally protect itself by requiring the subscriber to forfeit any payments already made in so far as these payments might be required in bringing to the corporation the original subscription price of the shares.

Suppose, for example, that A subscribed for fifty shares of stock with par of \$100.00 each, agreeing to pay therefor the par value of each share, and making an initial payment of 25 per cent, or \$1,250.00. He later forfeits the fifty shares and they are sold to B at \$90.00 per share. The settlement, which would protect the corporation against loss, would be journalized as follows:

- |  |          |          |
|--|----------|----------|
| (a) Subscriber   | 5,000 00 |          |
| (A's Subscription Acct.)   |          |          |
| Unsubscribed Stock   |          | 5,000 00 |
| Entering A's subscription for 50 shares of stock   |          |          |
| (b) Cash   | 1,250 00 |          |
| Subscribers  |          | 1,250 00 |
| (A's Subscription Acct.)   |          |          |
| Crediting the controlling subsidiary subscription amount for A's payment on his subscription |          |          |
| (c) A's Account  | 3,750 00 |          |
| Subscribers  |          | 3,750 00 |
| (A's Subscription Acct.)   |          |          |
| A forfeits his subscription and is charged with the balance of the account                   |          |          |
| (d) Subscribers  | 4,500 00 |          |
| (B's Subscription Acct.)   |          |          |
| A's Account  |          | 4,500 00 |
| Crediting A with amount of B's subscription to stock forfeited by A                          |          |          |
| (e) Cash   | 4,500 00 |          |
| Subscribers  | •        | 4,500 00 |
| (B's Subscription)   |          |          |
| Payment of B's subscription to forfeited stock   |          |          |

(f) A's Account	750 00	
Cash		750 00
Payment to A of balance due from sale of his forfeited subscription		

The (f) entry would close the account with A, and B's subscription account would be closed by the (e) entry. The additional entries involved in the issue of the stock would be made in accordance with one of the plans described above. If capital stock had been credited with the total of the authorized stock and no capital stock subscription had been opened, no further entry would be required.

### QUESTIONS AND PROBLEMS

1 How would goodwill enter into the books of a partnership if its assets were purchased by a corporation? On what basis would it be distributed to the partners?

2 If the assets of a partnership be \$200,000 00, the liabilities, \$50,000 00, the interests of partners Smith and Jones, \$45,000 00 and \$55,000 00, respectively, and the partners sell their interests to a corporation J for stock equal to the book value of their respective interests, make the journal entries showing two forms of transfer which would close the books of the partnership.

3 Make the opening entries of the corporation according to four different possible forms of entry. Which form seems preferable in this case? Why?

4 Make the transferring entry on the assumption that the corporation uses the same books of record as the partnership.

5 The partners in the firm of Smith and Jones decide to incorporate and operate their business under the name of the Star Mercantile Company. The partnership agreement provided that profits and losses should be divided  $\frac{2}{3}$  to Smith and  $\frac{1}{3}$  to Jones. The balance sheet of the partnership on December 31 after the closing entries for the year had been made and profits closed into the partners' accounts was as follows:

#### SMITH & JONES

##### BALANCE SHEET, DECEMBER 31, 1916

Cash	\$1,925 00	Notes Payable	\$2,000 00
Notes Receivable	2,800 00	Accounts Payable	8,170 00
Accounts Receivable	14,420 00	Jones, Capital	14,825 00
Inventory	30,000 00	Smith, Capital	27,150 00
Furniture and Fixtures	3,000 00		
	<u>\$52,145 00</u>		<u>\$52,145 00</u>

The agreement under which the business is to be incorporated provides for the following

- (a) Capital stock, \$50,000 00, divided into 500 shares, par value \$100 00
- (b) Jones & Smith to be paid for their interest in the old partnership with the stock in the corporation at par, the following adjustments to be made prior to the transfer of the business

- (1) 10 per cent is to be deducted from the inventory value
- (2) 5 per cent is to be deducted from the value of furniture and fixtures
- (3) The goodwill of the partnership is valued at \$6,000 00 and placed on the books prior to the transfer

- (4) No cash is to be turned over to the corporation. Smith is to take personally all cash excepting an amount sufficient to reduce Jones' investment to even hundreds of dollars

- (5) Jones & Smith jointly guarantee collection of accounts receivable

- (c) The stock remaining after the payment of the partners for their interest is subscribed for by Brown, who pays for his stock in cash

Give the entries to adjust the books of the partnership and to close out the partnership business. Open the books of the corporation. Give the balance sheet of the corporation after the opening entries have been made

- (6) Make the opening entries on the books of the Taylor Electric Company, a concern which is incorporated according to the following agreement

Capital stock, \$200,000 00

H. C. Taylor, the promoter of the enterprise, is to receive shares to the par value of \$100,100 00 for which he is to pay \$90,000 00 in cash in two equal installments. He is to receive credit toward his subscription for \$10,100 00 on account of services rendered during the process of incorporation. Stock to the par value of \$40,000 00 is subscribed for by Howard at 110, payment to be made in two equal installments. Jones subscribes for \$10,000 00 at 110, payment to be made in two equal installments. The remaining \$49,900 00 of stock is given to Smith in full payment for his electric lighting plant.

Taylor, Howard, and Jones all pay their first installment as it comes due. Make the entries.

Taylor pays his second installment in cash, Howard pays \$15,000 00 in cash and gives a note due in 30 days for the remainder. Jones defaults in his payment. The stock subscribed for by Jones is sold by the directors to White at 105. White pays for the stock in cash, and the directors refund to Jones the amount of his first payment above the sum necessarily retained to protect the corporation against loss. Make the entries.

An appraisal is made of the Smith plant at this point which shows the following facts:

Land	10,000 00
Buildings	20,000 00
Transmission Lines	15,000 00
Accounts Receivable	1,000 00
Accounts Payable	<u>3,000 00</u>
	49,000 00

Place the assets on the books at their appraised value.

## CHAPTER XXVII

### BOND ACCOUNT

**1. Issue of Bonds.** — When mortgage bonds are issued, the consent of the stockholders is first secured. Then a deed of trust is created fully describing the terms under which the issue is made and a trustee is selected and charged with the duty of certifying all bonds proposed before they are actually issued by the corporation. The bonds are then prepared in due form and turned over to the trustee for certification before they are issued to subscribers who have paid in full for their bonds.

**2. Bond Subscriptions.** — Bonds may be paid for in full at the time of their purchase. In some instances, however, a subscriber will have the right of paying for his bonds on the installment plan. For brevity, however, the most usual entry for an authorized issue of \$500,000 00 of first mortgage bonds, \$400,000 00 of which had been subscribed, would be as follows:

- |   |            |            |
|---|------------|------------|
| (a) Unissued Bonds                                | 500 000 00 |            |
| Bonds Payable                                     |            | 500,000 00 |
| Authorization of half million of first mortgage 5 |            |            |
| per cent bonds due December 31 1940,              |            |            |
| dated January 1, 1920, interest payable           |            |            |
| January 1 and July 1                              |            |            |
| (b) Bond Subscribers                              | 400,000 00 |            |
| (Subsidiary subscription accounts in subscrip-    |            |            |
| tion ledger )                                     |            |            |
| Unissued Bonds                                    |            | 400,000 00 |
| Entry of subscription for \$400,000 00 of first   |            |            |
| mortgage 5 per cent bonds                         |            |            |
| (c) Cash  | 100,000 00 |            |
| Bond Subscribers                                  |            | 100,000 00 |
| (Subsidiary subscription accounts credited also)  |            |            |

A more accurate description of the accounts would require a substitution of an account of *unsubscribed bonds* for that of un-

issued bonds. But the usage indicated in the journal entries is the more general although it makes the word "unissued" mean the same thing as the word "unsubscribed." The subsidiary ledger for bond subscribers would be of the same character as that for stock subscribers described in a preceding chapter.

The best usage would require the bond item on the liability side of the balance sheet to appear as follows

Bonds Payable	\$500,000 00
Less Unissued	100,000 00
Bonds Issued	\$400,000 00

When the subscriptions had been paid the "bonds issued" would become the bonds outstanding. There is some controversy as to whether *unissued bonds* should be treated as an asset or as a deduction from the liability as shown above. The merits of the case are more fully discussed in a paragraph below. Bonds which are simply authorized are preferably regarded as a deduction from bonds payable.

**3. Bond Discount.** -- Bonds always bear a fixed rate of interest which is payable at stated times, annually, semi-annually, or quarterly. If the nominal rate which the corporation promises to pay on the par or face value of the bonds is lower than the acceptable rate for such loans the bonds cannot be sold for the par value but must be sold at a discount. Let us suppose that the bonds referred to above bear 4 per cent interest payable semi-annually, Jan 1 and July 1, and bring only 90 cents on the dollar or sell at a 10 per cent discount. Then the sale would be journalized as follows

Cash	360,000 00	
Bond Discount	40,000 00	
Bonds Payable		400,000 00

**4. Treatment on Bond Discount.** — The interest paid for the use of money is the expense involved in securing the loan of the funds borrowed. But when the face value of the bond payable exceeds the amount of money secured the cost of the loan is the interest plus the discount on the bonds. This ex-

cess in the face of the bond represents interest paid in advance. Bond discount, therefore, partakes of the nature of a deferred expense and should be classified with the deferred expenses in the balance sheet. During the life of the bonds, this interest paid in advance is treated from year to year as insurance paid in advance has been treated. The expired part of the payment is marked off each year. A rough calculation of *expired discount* for each year could be had by dividing the total discount by the life of the bonds. However, a more accurate computation of expired discount can be made by the use of bond tables showing the yield of the bond sold at a discount or the effective (true) interest received by the investor and paid by the corporation. Let us suppose, for example, that a \$1000.00 bond with nominal rate of 4 per cent and effective rate of 5 per cent was sold at \$950.00. The following table will show the expired discount each year.

Nom Prin	Cost Prin	Effective Interest	Nominal Interest	Expired Discount
1,000	950.00	47.50	40.00	7.50
1,000	957.50	47.87	40.00	7.87
1,000	965.37	48.26	40.00	8.26

The entry which the corporation would make at the end of the first year for the interest on the \$1000.00 bond would be as follows:

Interest	47.50	
Cash		40.00
Bond Discount		7.50

The effective rate is the interest basis upon which the bonds are sold and the yield on the investment. In the case above cited the \$950.00 represents the actual investment made by the bond buyer. The corporation pays effective interest on these funds and the amount of interest at the effective rate represents the interest cost to the corporation. Although the nominal interest is \$40.00 per year the effective interest is \$47.50 for the first year, \$7.50 of this amount being expired discount on the bonds. This accurate method of amortizing is referred

to as the scientific method. The division of the bond discount by the life of the bonds to get the amount of expired discount is referred to as the straight line method.

If the bonds had been purchased at a discount instead of being sold, the principal would be increased each year as the bond approached maturity. The amount of increase in principal each year would be credited to interest. The entry for the first year would be as follows:

Cash	40 00	
Bond Investment	7 50	
Interest		47 50

**5. Bond Premiums** -- If, on the other hand, 5 per cent bonds were sold at \$1100 00 on a 4 per cent basis, i e., to yield 4 per cent, a part of the \$50 00 of interest paid each year would be a return of the bond premium. The premium is like deferred income or interest received in advance. The amount paid as interest each year is in part a return of the premium. The purchaser of the bond pays money in advance for the right to receive more each year than the effective rate on the par of the bonds purchased. The seller of the bond should credit his interest account each year with the amount representing a return of premium and charge the bond premium with the same amount. The following table shows the nominal and effective interest and the excess of the nominal interest. This excess is the amount representing a return of a part of the premium received.

Principal Nominal	Invest Price of Bond	Nominal Interest per Year	Effective Interest per Year	Excess of Nominal Interest
1,000 00	1100 00	50.00	44 00	6.00
1,000 00	1,094 00	50 00	43 76	6 24
1,000 00	1,087 76	50 00	43 51	6 49

The payment of the \$50 00 nominal interest the first year would be journalized as follows:

Interest	44 00	
Premium on Bonds	6 00	
Cash		50 00



If, however, the corporation should purchase such a bond as an investment a part of the interest received each year would be credited either to premium on bonds or to *bond investments* in case the premium were not carried as a separate account. The journal entry would be as follows

Cash	50 00	
Interest		44 00
Bond Investment		6 00

**6. Bond Investment Account.** — When bonds are purchased the date of purchase will not in general correspond with the interest date of the bonds. There will be accrued interest at the date of purchase. For example, \$5000 00 of 6 per cent bonds, interest payable Jan. 1 and July 1, may be purchased March 15 in New York City. Interest has accrued for a fraction of the half-year interest of 3 per cent. If the bonds are purchased at 102 and accrued interest the question arises as to the price paid. Since the accrual calculation here involves the payment of a money price, the accrued interest calculation might be made with accuracy at  $73 \frac{181}{360}$  of the 3 per cent annual interest payment to be made July 1, or  $73 \frac{181}{360}$  of \$300 00, which is \$60 49. The cost of the bonds would be \$5160 49. If 360 days were taken as the year and the half year taken as the unit, since one half of the annual interest is paid July 1, then the accrual fraction would be  $73 \frac{180}{360}$  instead of  $73 \frac{181}{360}$  and the accrued interest \$60 84. If, however, the month be taken as the unit for accruals and be regarded as consisting of 30 days, then the accrual would be for  $2 \frac{7}{12}$  months and would amount to \$61 00. This less accurate method is frequently used in accruals for the purpose of closing the books. The New York Clearing House method would make the interest \$60 84 since 360 days is treated as a year according to the rules of the clearing house. According to the statute law of the state of New York the accrued interest would be \$60 49 because 365 days constitute the year according to the statute in question and the number of days falling in each half year is taken as you find it except that the extra day of the leap year is ig-

nored. We may, therefore, assume that the bonds are purchased at \$5160 49. The journal entry would be as follows:

Bond Investments	5,100 00	
Bond Interest	60 49	
Cash		5,160 49

On July 1 the corporation would receive the \$150 00 of interest for the half year. At that time the appropriate journal entry is the following

Cash	150 00	
Bond Interest		150 00
Entry of payment of semi-annual interest		

The \$60 49 of the \$150 00 received by the corporation was interest income for the seller of the bond and not for the buyer. The seller of the bond held as an investment would have journalized his sale as follows

Cash	5,160 49	
Bond Investment		5,100 00
Bond Interest		60 49

If the issuing corporation sold the bonds at \$102 00 and accrued interest it would journalize the sale as follows

Cash	5,160 49	
Unissued Bonds		5,000 00
Bond Premium		100 00
Bond Interest		60 49

When a bond issue is placed on the market it accumulates interest, in case the sale materializes, from the date of the bond. In case the sale did not materialize the corporation would find no good reason for paying interest to itself on unissued bonds. If, however, a corporation invests in its own bonds with a view to accumulating a fund for some purpose by setting aside the interest, then the corporation may pay itself interest on its own bonds.

If the buyer of a bond were strict in his computation he would object to paying what is described above as accrued interest in addition to the fair investment price of a bond. The accrued interest right figured at \$60 49 is worth a little less

than \$60.49 because about two and one half months elapse before the sum is received. This fact, however, seems to be largely ignored in the bond market and this right to receive \$60.49 several months later is consequently purchased at its face value instead of at its discounted value.

**7. Treasury Bonds.** — The term *treasury bonds* is not limited altogether to the meaning of bonds sold and later repurchased by the corporation. It is also applied to unissued bonds either certified by the trustee or simply authorized under a mortgage or other written instrument. The Interstate Commerce Commission has defined as *nominally issued bonds* those which have been certified by the trustee and placed with the proper officer for sale and delivery, or pledged, or placed in some fund of the corporation. If bonds which have been issued and outstanding are reacquired by the corporation they are designated by the Interstate Commerce Commission as *nominally outstanding bonds*. It would seem desirable to retain for the treasury bond term a meaning similar to that applied to treasury stock if usage had not already rendered the term ambiguous. It is not unusual in corporation accounting to include the *nominally outstanding* bonds in some special fund or in the investment bond account. From the standpoint of their availability for corporate uses there are the following four classes of bonds: (a) unissued bonds, or those authorized and not "nominally issued", (b) those nominally issued, (c) those nominally outstanding, (d) those actually outstanding, or those sold to a bona fide purchaser and not reacquired.

There must always exist in fact a liability for bonds actually outstanding which cannot exist for the other classes. If a corporation became insolvent and its assets are sold to meet the claims of the creditors none of the types of bonds except actually outstanding bonds would have a claim against assets which would be considered by the owners of other claims against assets. The pledged bonds nominally issued might become actually outstanding bonds when the creditors holding them as security saw fit to foreclose. It would consequently be significant to show bonds payable in the balance sheet in the following form:

Bonds Payable
Less
Unissued Bonds
Nominally Issued Bonds
Nominally Outstanding
Bonds

### Bonds Payable Actually Outstanding

The question arises as to how the nominally outstanding bonds should be entered when purchased. This question is involved in the nature of the transaction. A candid examination of the facts must require the conclusion that the purchase of a corporation's own bonds to the amount of \$5000 00 decreases its liabilities by the same amount, but does not increase its assets. If, for example, the bond in question were a first mortgage bond the holder of a second mortgage bond would be in error if he counted the \$5000 00 of nominally outstanding bonds as a liability in the calculation of the amount of liability prior to his own. If the assets were liquidated and the corporation were dissolved, no funds would be required to meet the nominally outstanding bonds which had been purchased.

If the corporation purchased back at par \$5000 00 of bonds sold at 102 and accrued interest the entry would be

Nominally Outstanding Bonds	5,000 00	
Cash		5,000 00
Purchase of \$5,000 00 of company bonds at par		

If they had been purchased at 101, the entry would be:

Nominally Outstanding Bonds	5,000 00	
Premium on Bonds	50 00	
Cash		5,050 00
Purchase of \$5,000 00 of company bonds at 101		

By this transaction the corporation lost \$50 00 of the premium secured in the original issue of the bonds. This treatment of the account of nominally outstanding bonds would result in a correct statement of the liabilities when the nominally outstanding bonds, the nominally issued bonds, and the unissued

bonds are subtracted from bonds authorized to show the bond liability of the corporation

The same principle would apply to the entry of bonds if purchased at a discount. The account would be charged with the par of the bonds and bond discount would be credited along with the cash credits, if the bonds had been sold at a discount. The bond premium would be debited if the bonds had been sold at a premium. The treatment of the purchase of company bonds and the treatment of reissued bonds as deductions from outstanding liabilities is not in accord with more general practice, although it has some adherents<sup>1</sup>

It is argued by some that the purchase of company bonds for sinking fund purposes makes it desirable to treat such bonds as a sinking fund investment at their purchase price so that the sinking fund will maintain the proper proportions when compared with the bond liability. If, however, the purchase of company bonds be regarded as decreasing the liability of the corporation and the funds used be regarded as a credit to the sinking fund, the sinking fund would still bear the right proportion to the bonds outstanding. The terms of a deed of trust might make such a treatment of the case inadvisable, but there seems to be no fundamental reason why the deed of trust should be so drawn that bonds nominally outstanding would be necessarily treated as an asset when purchased with funds from the sinking fund.

However, when company bonds are carried in the sinking fund they would be entered as any other bond investment so far as their book value and cost are concerned. They would be entered at cost and their premium or discount would be duly authorized, or spread over the life of the bond as set forth in a preceding paragraph.

In case it was found desirable to use the term "bonds in the treasury" to indicate all bonds certified by the trustee and held in the treasury either as a result of the purchase of company bonds or as a result of delay in the sale of certified bonds, the liabilities of the corporation would be correctly represented in

<sup>1</sup> See C. S. Luddam, C. P. A. (N. Y.), *Journal of Accountancy*, March, 1914

the balance sheet by showing this class of bonds along with the unissued bonds as a deduction from those authorized. The items would appear as follows

Bonds Payable
Less
Unissued Bonds
Bonds in the Treasury

#### Bonds Payable Outstanding

In case, however, one desires to make the bond classification fully descriptive, it will be found useful to adopt the Interstate Commerce Commission's classification. The classification, at least, serves the purpose of the most complete analysis

### PROBLEMS AND QUESTIONS

1. The ABC Corporation is incorporated to take over the assets and the liabilities of the AB partnership and of C's individual business. The AB partnership has assets and liabilities as follows

<i>Assets</i>		
Plant and Property	\$150,000 00	
Furniture and Fixtures	20,000 00	
Merchandise Inventory	75,000 00	
Cash	10,000 00	
	<hr/>	\$255,000 00
<i>Liabilities</i>		
Notes Payable	\$20,000 00	
Accounts Payable	50,000 00	
	<hr/>	70,000 00
A's Capital	100,000 00	
B's Capital	85,000 00	
	<hr/>	\$185,000 00

C has assets and liabilities as follows

<i>Assets</i>		
Plant and Property	\$85,000 00	
Delivery Equipment	10,000 00	
Furniture and Fixtures	15,000 00	
Merchandise Inventory	50,000 00	
Cash	4,000 00	
	<hr/>	\$164,000 00
<i>Liabilities</i>		
Notes Payable	15,000 00	
Accounts Payable	35,000 00	
	<hr/>	50,000 00
C's Capital		\$114,000.00

The AB partnership is allowed for goodwill \$25,000 00, after plant and property is marked down \$10,000 00. C is allowed a goodwill of \$12,000 00 and the merchandise inventory is reduced by \$5,000 00.

The ABC Corporation authorized \$400,000 00 of capital stock and \$100,000 00 of first mortgage 4½ per cent bonds, dated January 1, 1920, and due January 1, 1940, with interest payable annually January 1. The bonds are sold on a 5 per cent basis to the Central Trust Co. at 92 77 and accrued interest, one half in cash at the time of subscription and the balance in 60 days. A, B, and C also subscribe for \$20,000 00 each in capital stock, paying 10 per cent down, the balance to be paid in equal installments in three and six months respectively.

- (a) Make journal entries to transfer the partnership to the corporation.
- (b) Make journal entries to transfer C's business to the corporation.
- (c) Make the opening on the books of the corporation.
- (d) Make journal entries also covering the sale of the bonds.
- (e) Make also the interest entries for the bonds January 1, 1921, when the first annual interest is paid.

2. Define the various classes of bonds according to the Interstate Commerce Commission classification.

3. (a) On April 1 the company bought for cash \$5,000 00 of 5 per cent bonds on a 6 per cent basis at 90 and accrued interest. The bonds were dated January 1, 1918, the interest date being January 1 and July 1, and the purchase was made in the state of New York, where 365 days is counted as a year. Journalize the purchase, designating the bonds as *treasury bonds purchased*.

(b) On September 1 the bonds are sold at 95 and accrued interest. Journalize.

## CHAPTER XXVIII

### CHANGES IN THE VALUE OF THE PROPRIETARY INTEREST OF THE CORPORATION

**1 Definition of Profits** — Much has been written by accountants, economists, and others about profits and the meaning of the term. For the purposes of this elementary treatise the term net profits may be defined as the earnings of the proprietary interest after all prior contractual payments and accruals have been duly considered. When a corporation has been first organized the proprietary interest is represented by the capital stock. The additions to the proprietary interest from year to year are credited to the surplus account so that the proprietary interest of a corporation which has been in operation for a period of time is represented by the capital stock plus the surplus. The periodic additions to surplus from year to year represent the increases in the proprietary interest or in the stockholders' interest.

The increase in the proprietary interest due to the business operations for which a concern is organized is referred to as the *profits from operation*. There are also sources of income indirectly associated with regular operations such as investments in related enterprises or incidental rentals and earnings. These incomes are generally designated as *other income*. The term *net profits* is used to designate the balance after incidental and interest expense deductions are made from the total income resulting from the addition of other income to profits from operation. These *net profits*, however, generally mean the *ordinary net profits*. Profits from the sale of fixed assets or any extraordinary profit are frequently carried directly to the surplus account. The *total net profits*, however, would include the extraordinary net profits and hence comprise the total net increase in the proprietary interest.



**2. Book Value of Shares.** — When the corporation is organized the shares stand on the books at the par value and there is not generally any surplus reserve, since this reserve is accumulated from annual profits. Let us suppose that plant and property are transferred to the ABC Corporation at \$500,000 00, and that capital stock to the par value of \$500,000 00 is issued to the owner of the plant and property. Let us further suppose that \$500,000 00 additional stock is sold for cash at par. The balance sheet would then be as follows:

ABC CORPORATION			
BALANCE SHEET, DECEMBER 31, 1920			
<i>Assets</i>		<i>Liabilities</i>	
Cash	\$500,000 00	Capital Stock	\$1,000,000 00
Plant and Property	500 000 00		
	\$1,000 000 00		\$1,000 000 00

The book value of each share is \$100 00 in the beginning. After a year's operation the net profits of, say, \$50,000 00 are carried to surplus and the balance sheet would be as follows:

ABC CORPORATION			
BALANCE SHEET, DECEMBER 31, 1921			
<i>Assets</i>		<i>Liabilities</i>	
Cash	\$250 000 00	Capital Stock	\$1,000,000 00
Accounts Receivable	40,000 00	Surplus	50,000 00
Merchandise Inv.	200,000 00		
Furniture and Fixts.	20,000 00		
Plant and Property	540,000 00		
	\$1,050 000 00		\$1,050 000 00

After the \$50,000 00 of profits have been added to surplus the total proprietary interest is then \$1,050,000 00. If the par value of a share is \$100 00 the number of shares would be 10,000 and the book value of shares on December 31, 1921,

would be \$1,050,000 00 or \$105.00 per share. When the surplus had accumulated to \$500,000 00, the book value of a share would be \$150 00

**3. Declaration of Dividends.** — Instead of adding the net profits of each year to surplus there may be a distribution from surplus of a part of the accumulated earnings. It creates a more favorable market for a stock if a dividend of a certain amount is paid each year. The initial dividend should not be placed so high that it will probably be necessary to reduce it in later years in order to preserve the surplus accumulated before the initial dividend is declared. The market value of the stock is favorably affected by a stable dividend or, at least, one that is not decreased from year to year. It is common, therefore, for a corporation, in prosperous years, to declare an increased dividend as an extra dividend. If the regular dividend is 6 per cent and it seems feasible for a particular year to declare an 8 per cent dividend, the declaration may take the form of a regular dividend of 6 per cent and an extra dividend of 2 per cent. The regular dividend would not be made 8 per cent until it seemed probable that the annual dividends of the future would not fall below 8 per cent. The payment of dividends makes it necessary to have a list of stockholders with addresses. When stocks are sold they must, therefore, be recorded in the books of the treasurer as transferred. A transfer book is frequently used for this purpose, the shareholder who sells his shares would be charged in his capital stock account for the par value of the shares sold and the purchaser would be credited in the capital stock ledger for the par value of the shares purchased. The capital ledger, therefore, will furnish the list of stockholders which will suffice for the payment of dividends.

The dividends are declared as payable to the shareholders of record as of a certain date and are also declared as payable a few days after this date of closing the transfer books for the purpose of making a list of stockholders. Suppose a 2 per cent dividend were declared as payable January 15, 1922, to stockholders of record January 1, 1922. Books might then be closed

for transfer purposes from January 1, 1922, to January 15, 1922. The stocks sold between January 1 and January 15 would be sold ex-dividend. If the dividend were 6 per cent the market value of the share on January 1 should decrease \$6 00 per share. If a share were purchased January 2 the seller would receive the dividend of January 15, although he might not own the share at that time. The buyer takes the share ex-dividend, which means that he will not receive the approaching dividend.

**4. Journal Entry of Dividends.** — If a 2 per cent dividend were declared December 15, 1921, payable January 12, 1922, on the \$1,000,000 00 of stock the journal entry would be as follows:

DECEMBER 15, 1921

Surplus-Dividend	10,000 00	
Dividend Payable		10,000 00
Declaration of dividend on common stock		

When the dividend was paid the entry would be

JANUARY 15, 1922

Dividend Payable	10,000 00	
Cash		10,000 00
Payment of 2 per cent dividend		

**5. Dividends and Book Value.** — The surplus has been reduced \$10,000 00 by the dividend and the total book value of the proprietary interest has been reduced from \$1,050,000 00 to \$1,030,000 00, the book value per share being reduced from \$105 00 to \$103 00.

**6. Book Value and Market Value.** — The book value of shares signifies what has been invested by the proprietary interest rather than the present sale price of this investment. The annual total net profits of a corporation divided by the number of shares represents the annual earnings of each share. The market value of a share depends more on its prospective annual earnings than on the book value. An increase in book value has a significance because it is fair to presume that the increased investment per share will result in increased earnings.

per share. If the prevailing rate of interest which investors may expect on an investment of the character of the ABC Corporation stock were 8 per cent and the annual earnings amount to only 5 per cent on the par of the stock or \$5.00 per share, then the shares would sell for \$5.00108 or \$62.50 per share. The rate of capitalization in this case is 8 per cent. There are various factors affecting this rate, such as the risk involved and the policy as to dividend distribution. For good investments (those involving little risk) the rate is lower and the value of a given prospective annual earning is greater. It is clear that anything affecting the expected earnings of a corporation will also affect the market value of its shares.

**7. Stock Dividends.** — The stock dividend accomplishes for the stockholders of the corporation substantially the same thing that the credit to capital accomplishes in the case of the partnership. It is a device by which the surplus of the corporation is carried to the credit of the stockholders in the form of a certain number of shares with a definite par value. A stock dividend is never declared unless there is a corporate surplus accumulated to offset the stock dividend. Let us suppose that the ABC Corporation after accumulating a surplus of \$500,000.00 decides to issue a stock dividend of 25 per cent. This stock dividend would carry to each shareholder with four shares an additional share, making his interest to consist of five shares in the corporation instead of four. However, the aggregate proprietary interest consisting of capital stock plus surplus is not affected by the stock dividend. Part of the proprietary interest which was formerly classified as surplus is, after the declaration of the stock dividend, classified as capital. The journal entry for the declaration of the 25 per cent dividend would be as follows:

Surplus-Stock Dividend	250,000 00	
Dividend Payable		250,000 00

The dividend would again be declared payable on a certain date to stockholders of record on a prior date. The payment of the dividend would be accomplished by the issue of 250

shares which would be distributed as a 25 per cent dividend on the holdings of each shareholder in the corporation. Some of the shareholders would receive fractional shares, since 25 per cent of their holdings would not represent an integral number of shares. When the dividend is paid the journal entry would be as follows

Dividend Payable	250,000 00	
Capital Stock		250,000 00

The specific shareholders' accounts in the stock ledger would be credited with the additional shares going to each shareholder as a result of the declaration of the stock dividend.

The Supreme Court has recently held that a stock dividend is not income. The only peculiarity about the question is that a stock dividend should have ever been supposed to constitute income. It is clear that the shareholders and the corporation itself own no more after the declaration of dividends than they owned before the declaration. The ownership of shares carried with it the ownership of the surplus and the distribution of additional shares did not increase the total equity or the total book value of interest in the assets of the corporation. An income to the shareholders from the corporation always results in a decrease in the assets of the corporation.

**8. Subscription Rights.** -- Frequently the shareholders of a corporation decide to increase the capital stock by issuing an additional number of shares to be paid for at the par value. If, however, the shares have a market value in excess of par, as a result of the accumulation of the surplus, the new shares issued will ordinarily sell for more than their par value after they have been subscribed for and issued to the stockholders. As a result of this fact, the stockholders ordinarily reserve for themselves the right to purchase the new shares, each shareholder having the right to purchase an amount of the new shares in proportion to his holdings at the time of the issue. If the capital stock were increased 25 per cent, each shareholder would be entitled to subscribe for additional shares in an amount equal to 25 per cent of the number of shares already owned.

by the stockholder. A stockholder owning four shares would have the right to subscribe for the additional share which he is entitled to purchase. He would, however, have the alternative of selling his right at its market value on the open market. Let us now see what the value of a right to subscribe would be. Suppose, for example, the market value of the shares of a corporation is \$150.00 per share. Four of such shares would be worth \$600.00. One additional share at \$100.00 would mean that the assets back of the five shares including the additional one issued would be worth \$700.00 and consequently the value of the assets corresponding to each share would be  $700/5$  or \$140.00. In other words, by paying \$100.00 a man with four shares acquires an additional share worth \$140.00. The profit on the transaction is clearly \$40.00. The subscription right, therefore, going with each one of the four shares would be worth one fourth of the \$40.00, or \$10.00 per share. In such an instance, rights would sell at approximately \$10.00 per share held prior to the new issue. The actual market value of the rights may vary to some extent from the calculated value of the right to subscribe, on account of the particular circumstances affecting the demand for the stock in question, but in general the market value will not fluctuate widely from the calculated value of the right as indicated above. The journal entry involved in the issue of additional stock does not differ from the entries already described in connection with opening the books of the corporation.

**9. Discount on Stock.** — While most of the states require that all capital stock shall be issued for property worth not less than the par value of the stock issued, there is still a possibility in some parts of the country and in other countries, of issuing shares for an amount of cash less than the par value of the shares in question. If \$250,000.00 of capital stock is issued at seventy-five cents on the dollar, the entry would be as follows:

Cash	187,500.00	
Discount on Stock	62,500.00	
Capital Stock		250,000.00

This discount of \$62,500 00 represents in fact that the proprietary interest when stated at \$250,000 00 is overstated by \$62,500.00. This overstatement may be remedied by crediting each year a certain portion of the corporate surplus to discount on stock. Let us suppose, for example, that it was decided to mark off the \$62,500 00 of discount on stock over a period of ten years. Each year \$6,250 00 of the discount would be charged against the surplus, the journal entry being as follows:

Surplus	6,250 00	
Discount on Stock		6,250 00
Charging discount on stock to surplus		

At the end of ten years the discount on stock would have disappeared, and the capital stock liability would fairly represent the actual investment of the stockholders in the corporation. At any time prior to this, the proprietary investment would be fairly represented on the liability side of the balance sheet by the deduction of the discount on stock from the capital stock issued. For example, at the end of the first year, when \$6,250 00 of the \$62,500 00 had been charged against surplus, the following statement of the capital stock item would fairly represent the proprietary capital investment:

Capital Stock	\$250 000 00
Less Discount on Capital Stock	56 250 00
	— — — — —
Capital Stock Investment	\$193 750 00

This manner of statement, however, is not one generally adopted, although it would be the most desirable statement of fact. In some instances the discount on stock may be carried on the asset side of the balance sheet, where it would serve to convey the idea of an amount of assets in excess of a fair statement of the total investment in these assets. There are some who have argued that a discount on stock is a part of the cost of the property actually turned over in exchange for the stocks. This, however, seems to be a superficial view of the nature of the transaction involved.

**10. Premium on Stock.** — It is much more common, however, to have stock issued in the first instance for cash in ex-

cess of the par value of the shares than it is to receive an amount of cash less than the par value of the stocks issued. Property is frequently overvalued in connection with the issue of stock. However, when shares are issued for cash in connection with an original issue they are more commonly sold at the par value of the shares. The national banks frequently sell shares in excess of par, because the law requires the bank to accumulate a certain surplus prior to the declaration of the dividends. If, however, the required surplus is contributed by the shareholders in connection with the organization of the corporation, there will be no legal prohibition against the payment of dividends even during the first year of the operation of a bank. If \$200,000 00 of capital stock is sold at 120, the journal entry would be

Cash	120,000 00	
Capital Stock		100 000 00
Premium on Stock		20,000 00
Sale of \$100,000 00 of capital stock at premium of 20 per cent		

The national banks, however, generally credit the \$20,000 00 to surplus instead of designating the item as premium on capital stock. It seems desirable, however, that the word "surplus" be used to describe the increases in proprietary interest from year to year arising from the operations of the business rather than from initial investment. It is of course true that the premium on stock is a part of the proprietary investment just as the surplus is a part of the proprietary investment, and should be added in with surplus in connection with the calculation of book value of the shares of the corporation. There is no occasion for the retiring of premium on stock. It is regarded as appropriate that the dividends shall be declared out of surplus accumulated from the earnings of operation. The contributed surplus, such as that arising from premium on stock, is ordinarily regarded as a part of the permanent proprietary interest of the stockholders rather than as a part of the surplus subject to distribution from time to time.



**11. Available Surplus.** — The term *available surplus* is ordinarily understood to designate that part of the surplus of a corporation which is available for dividends. There is no legal objection to the distribution of the entire accumulated surplus of a corporation. There would be no legal bar to a declaration of dividends from premium on stock, if this dividend did not reduce the surplus to an amount below that which might be required by law as in the case of the national banks. It is not regarded, however, as desirable business procedure to distribute to stockholders except from the surplus which has been accumulated from earnings. All of this surplus would be commonly regarded as available for the distribution of cash dividends or stock dividends. If one should define available surplus with reference to the amount of such surplus which would be available for cash dividends, it would be necessary to reduce further the amount of surplus which could be regarded as available. Cash cannot be distributed in excess of that which is on hand. If the cash on hand were less than the accumulated surplus then the surplus available for cash dividends would be less than the accumulated surplus. In some instances the corporation may borrow money for the purpose of declaring cash dividends, provided there is an available surplus out of which dividends can be properly declared. This type of loan, however, is unusual, and is not generally regarded as conservative business practice. If cash were temporarily tied up in current assets soon to be realized, it might be regarded as legitimate to make a temporary loan for the purpose of the payment of the dividend. The funds to be distributed to stockholders as a dividend might be secured from bank loans or by the issuance of bonds or notes. This is a procedure which does not reflect credit on the financial management of a corporation.

There is in the case of some corporations a term more convenient than *surplus* for indicating the accumulated earnings which are not regarded as a part of the permanent proprietary investment. This term is the *undivided profits* of the corporation. In many bank statements the term *undivided profits* will

be found Dividends of banks would, in general, be declared out of the undivided profits of the bank. When earnings are carried from the undivided profits into surplus, it is recognized that they become a part of the permanent proprietary investment of the corporation and they would not, in general, be distributed to stockholders unless they were later covered by a stock dividend. This stock dividend, however, is not in fact a distribution, and simply represents a different name or form for the proprietary investment. The undivided profits term would seem to be an entirely desirable form of designating the accumulated earnings which have not been so tied up in fixed assets or some other form of permanent investment that they would not be available for the declaration of cash dividends. Surplus would come to mean that part of the accumulated earnings of the property which has been used for the permanent enlargement of the enterprise of the stockholders, but has not been covered by issues of additional stock in the form of stock dividends.

**12. Appropriated Surplus.** — The words *appropriated surplus* are commonly used to designate that part of the corporate surplus which has been set aside for some special use. For example, if the corporation surplus amounted to \$200,000 00 and \$100,000 00 of this corporate surplus were set aside for property additions or for improvements, the journal entry would be as follows

Surplus	100,000 00	
Appropriated Surplus-Improvements		100,000 00

Instead of having all of the appropriated surplus items in one account it might be desirable to carry several accounts representing the purposes of the appropriations. In such cases the appropriated surplus item may be designated as a reserve. The alternative entry would then be:

Surplus	100,000 00	
Reserve for Improvements		100,000 00
Setting aside part of surplus for improvements		

The words *appropriated surplus* might then be used as the name of an item in the balance sheet under which the several special reserves would be listed. For example, if these reserves in the case of a given corporation were for improvements or for a sinking fund, they might be designated on the balance sheet as follows

Appropriated Surplus		
Sinking Fund Reserve	\$25 000 00	
Reserve for Improvements	50 000 00	75,000 00

The two accounts involved would be the sinking fund reserve and the reserve for improvements. The appropriated surplus would simply be the name of a group of accounts brought together in the balance sheet because of their similarity.

**13. Donated Stock.** - According to the laws of most of the states it is illegal to issue shares of stock with a par value in excess of the value of property transferred to the corporation in exchange for the shares. However, there is no efficient administrative provision in many of these states for the enforcement of the statute. Property is frequently transferred to the corporation in exchange for shares with a par value far in excess of the market value of the property received by the corporation. A group of individuals in organizing a corporation can transfer to the corporation a certain amount of property in exchange for the total amount of authorized capital. The capital thus becomes paid up stock. The shareholders can, if they see fit, donate to the corporation 25 or 50 per cent of the capital stock or such other amounts as they may determine, and the corporation will then have the right to issue this paid up capital to subscribers for treasury stock at such prices as the shares may bring on the open market. This procedure amounts in fact to an evasion of the law in regard to the issue of shares in exchange for property worth less than the par value of the shares issued. Let us suppose that X, Y, and Z organize a corporation and turn over their property to the corporation in exchange for capital stock with a par value of \$500,000 00. They then decide to raise working capital by donating to the

corporation 25 per cent of their respective holdings, to be later sold for the purpose of raising working capital. The journal entry involved in donating this stock to the corporation would be

Treasury Stock	125,000 00	
Donated Surplus		125,000 00
Donation of treasury stock by stockholders		

If the stock were donated with the specific provision that it should be used for *working capital* the account *working capital* might be substituted in the journal entry for the term *donated surplus*. It is also a general practice to regard the treasury stock as one of the assets of the corporation and donated surplus as one of the surplus reserves of the corporation. It is questionable whether in fact treasury stock can be fairly regarded as an asset of the corporation because of the fact that the corporation cannot own a proprietary claim in its own assets, that is, the corporation owns all of the assets and it owes the stockholders and the holders of liabilities for what it has received in the form of assets. If any claim, whether of the character of a bond or stock, is turned over to the corporation, its liabilities to the bondholders or to the stockholders would thereby be canceled. If no money were paid in exchange for the bond or stock, the surplus would be increased by the par value of the donated liability or proprietary interest. The actual proprietary investment would therefore be properly represented on the balance sheet by making treasury stock a deduction from capital stock issued, the balance being designated as outstanding capital stock. In the instance above cited, let us assume that the balance sheet stood as follows prior to the donation of the stock

BALANCE SHEET, XYZ CORPORATION

<i>Assets</i>		<i>Liabilities</i>
Plant and		Capital Stock
Property	\$500,000 00	\$500,000 00
		<hr/>

After the donation of \$125,000 00 of stock, the balance sheet might be properly represented as follows.

# BALANCE SHEET, XYZ CORPORATION

<i>Assets</i>		<i>Liabilities</i>	
Plant and		Capital Stock	\$500,000 00
Property	\$500,000 00	Less	
		Treas Stock	125,000 00
		Outstanding Capital Stock	375,000 00
		Donated Surplus	125 000 00
	\$500,000 00		\$500,000 00

This type of representation does not correspond to universal usage. Frequently treasury stock is carried in the balance sheet as an asset of the corporation. If the \$125,000 00 of treasury stock were sold for \$100,000 00 cash, the journal entry would be

Cash	100,000 00	
Discount on Treasury Stock	25 000 00	
Treasury Stock		125,000 00
Sale of the corporation's treasury stock		

At the time of closing the books, the *discount on treasury stock* account should be closed into the *donated surplus* account by the following journal entry

Donated Surplus	25,000 00	
Discount on Treasury Stock		25,000 00
Closing discount on treasury stock into donated surplus		

**14. Purchase of Treasury Stock.** — While it is not generally regarded as legitimate practice for a corporation to deal in its own capital stock, it frequently happens, nevertheless, that a corporation does purchase its own stock. This would be regarded as entirely legitimate, if it were under obligations to retire the stock at a certain designated time. The stock might then be retired by purchase in advance of the date when its re-

tirement might be required. If the XYZ Corporation should purchase \$20,000 00 of its outstanding stock at \$90 00 per share, the following entry might be made covering the purchase.

Treasury Stock	20,000 00	
Discount on Treasury Stock		2,000 00
Cash		18,000 00
Purchase of \$20,000 00 of treasury stock		

This form of entry would be more in accord with the donated stock entry described above. However, practice is not entirely uniform in regard to the entry of donated stock. There are some who regard treasury stock as an asset, and would therefore be inclined to enter donated stock at the estimated market value of the stock donated, and to credit donated surplus with a similar amount. Likewise, they would enter the purchase of the \$20,000 00 of capital stock referred to above as follows.

Treasury Stock	18,000 00	
Cash		18,000 00
Purchase of \$20,000 00 of stock at 90		

This latter entry would require that treasury stock be carried as an asset of the corporation while the former entry would require that the \$20,000 00 of treasury stock be carried as a deduction from capital stock issued, and would further require that the discount on treasury stock of \$2,000 00 should be closed into the surplus account at the time of closing the books. The latter usage seems to the writer to be more in accord with the facts and with the nature of the transaction involved. The fact is that treasury stock once purchased is canceled and additional shares are issued when a sale is made of an amount of stock equal to that which has been purchased. So far as the nature of the asset is concerned, there seems to be little difference between stock duly certified and ready to issue and stock which has been purchased subject to re-issue by the corporation. In both cases there is a decrease of the proprietary investment in the form of capital stock as compared with the authorized capital.

If \$10,000.00 of the \$20,000.00 of capital stock purchased

above were sold at \$95.00, the journal entry involved would be as follows:

Cash	9,500 00	
Discount on Treasury Stock	500 00	
Treasury Stock		10,000 00

If, however, treasury stock were regarded as an asset at \$18,000.00, then the sale of \$10,000 00 of stock costing \$9,000 00 at \$9,500 00 would be journalized as follows

Cash	9,500 00	
Treasury Stock		9,000 00
Surplus		500 00
Sale of \$10,000 00 of treasury stock costing \$9,000 00 for \$9,500 00		

A question might be raised as to whether a profit on treasury stock should be carried directly to surplus. It might be argued that the surplus should be specifically designated so as to differentiate it from the regular surplus of the corporation. In general, however, the profit would probably be carried directly to surplus. The writer does not believe that the latter entry represents the best practice because treasury stock is not believed to be properly regarded as an asset of the corporation.

**15. Sale of Fixed Assets** — There is a distinct advantage in showing the net profits item of the corporation from year to year in such form that it will be fairly comparable with the net profits of other years. This has ordinarily been accomplished in accounting by making the net profits revealed by the revenue statement to consist of the profits of operation plus the incidental profits derived from incidental investments of the business. Profits from the sale of fixed assets have then been generally closed directly into surplus without being shown in the regular revenue statement in the comparison of the progress of a business from year to year. However, there is also something to be said in favor of bringing the surplus account into the regular statement and showing the sources of additions to surplus that may arise out of extraordinary circumstances such as the sale of fixed assets.

**16. Surplus Account.** — At the beginning of each year the credit balance of the surplus account represents the accumulated earnings and profits from all sources which have not been distributed in previous years, or appropriated for the purpose of being used for certain designated purposes. At the close of the year the balance of the profit and loss account is carried to the credit of the surplus account. Dividends declared are debited to the surplus account. Likewise, separate surplus accounts are frequently created for such portions of surplus as may be designated as usable only for specific purposes. Corrections in the surplus account as at the beginning of the year, arising out of the discovery of errors in the accounts of a preceding year, would be carried as debits or credits to the surplus account at the end of the succeeding year. If several adjustments are made in the surplus account, an adjustment account is sometimes set up, and the balance of this account is carried to the surplus account. For example, let us suppose that the valuation of furniture and fixtures is to be decreased by \$750 00, the valuation of buildings to be decreased by \$3,000 00, and the reserve for bad debts is to be corrected by carrying \$1,500 00 of its balance to the credit of the surplus account. The following journal entries might be made to represent these changes

Adjustment Account	3,750 00	
Furniture and Fixtures		750 00
Buildings		3,000 00
Reserve for Bad Debts	1,500 00	
Adjustments		1,500 00
Surplus	2,250 00	
Adjustments		2,250 00

This series of entries would serve to bring all of the adjusted items to the surplus account as one total instead of carrying them to the surplus account as separate items. However, the adjustment account has less use in corporation accounting than in the accounting for partnerships. Each change in the value of assets would involve for the partnership a distribution to



the several capital accounts. The work is therefore very much shortened by the use of the adjustment accounts, thus avoiding all the distributions except the one final distribution of the net result of all the changes. In corporation accounting, however, the adjustment account has little value, as the various charges and credits can be carried directly to surplus without loss in clerical speed. The surplus account as a part of the revenue statement might be attached in the following form:

Net Profits for Year	\$
Surplus at the Beginning of Year	
	— — —
Total Surplus	
Add	
Portion of Bad Debt Reserve	\$
Profits from Sale of Fixed Assets	
Extraordinary Profits from Other Sources	
	— — — — —
Surplus Credit Adjustments	
Deduct	
Reduction in Valuation of Land	
Loss from Sale of Fixed Assets	
Extraordinary Losses	
	— — — — —
Balance Surplus	
Dividends on Stock	
	— — —
Final Surplus, End of Year	
Appropriations	
Reserve for Sinking Fund	
Reserve for Improvements	
Balance Unappropriated Surplus	

The inclusion of a form similar to the one shown above will indicate as a part of the revenue statement the entire disposition of the profits for the year and of all former profits earned by the corporation.

**17. Limitations to the Payment of Dividends.** — In many states there is a statute prohibiting the declaration of dividends except from profits and accumulated profits of the corporation.

It is intended by these laws to prevent the gradual dissipation of the original investment of the stockholders through the payment of dividends, and thereby protect not only the interests of the stockholders themselves but the interests of the creditors of the corporation. This statute is, however, not properly enforced until it is combined with a requirement that depreciation reserves be set up covering the value of assets which disappear through use and obsolescence. The courts have in some instances interpreted the statute to require the setting up of appropriate charges to depreciation, but in other states there are conflicting court decisions. In those states where neither the decision of the courts nor the statutes require depreciation charges against the fixed assets little can be accomplished by a statute prohibiting the declaration of dividends except from the profits or accumulated profits of the corporation. In the case of some corporations such as mining enterprises, oil property and mineral deposits of all kinds, it is obvious that the original investment will tend to disappear if the ownership of assets is confined to a specific deposit. As this deposit of coal, oil, or other mineral is extracted, no valuable asset remains except the scrap value of the machinery and assets used in developing the enterprise. It might not even be desirable that the original capital investment should be maintained in such an enterprise. The courts have not, in general, required corporations engaging in the exploitation of such natural resources to set aside reserves covering the reductions of fixed assets through mining operations.

**18. Sinking Funds.** — The creation of sinking funds involves an appropriation of a part of the accumulated surplus of the corporation. The appropriation is similar to that of appropriating surplus for improvements. The purpose of the appropriation from surplus in both cases is to indicate that the surplus so appropriated is not available for dividends. But in both cases no funds are set aside through the entries appropriating from surplus. The setting aside of funds involves a credit to cash and a charge to the fund thus created. When bond sinking funds are set aside they are generally turned over to

the trustee for the issue of bonds to be held at compound interest until the maturity of the bonds in question. The deed of trust of sinking fund bonds will generally provide a percentage of the face value of the outstanding bonds which shall be set aside each year for the sinking fund. The interest on the sinking fund thus set aside becomes a part of the sinking fund, although it must also be carried to the surplus reserve created to offset the fund thus set aside. If \$100,000 00 of 6 per cent bonds are sold to mature 20 years from date it is not a difficult matter to determine the annuity which must be set aside each year to amount to \$100,000 00 in 20 years. If we suppose that the funds with the trustee will yield 4 per cent each year we must find the sum, which, set aside at the end of each year, will amount to \$100,000 00 in 20 years. If an annuity of \$1 00 at 4 per cent amounts to \$29 78 in 20 years the \$100,000 00 will require an annuity of  $\$100,000\ 00 / 29\ 78$ , or \$3357 96. At the end of the first year after the issue of the bonds the following journal entry would be made

(a) Surplus	3,357 96	
Sinking Fund Reserve		3 357 96
Contribution to sinking fund reserve for retirement of bonds		
(b) Sinking Fund Trustee	3 357 96	
Cash		3,357 96
Charging trustee with annual sinking fund		

At the end of the second year the trustee would report the interest earned amounting to, say, \$134 32. The company would also set aside the annual amount required by the deed of trust, making the following journal entries.

(c) Sinking Fund Trustee	134 32	
Interest on Sinking Fund		134 32
Annual interest accumulated on the sinking fund		

This interest would, of course, go to the credit of the regular profit and loss and be credited to surplus at the close of the year. The company would then include this interest thus ac-

cumulated in its regular annual reservation from surplus as follows:

(d) Sinking Fund Trustee	3,357 96	
Cash		3,357 96
Charging trustee with annual sinking fund		
(e) Surplus	3,492 28	
Reserve for Sinking Fund		3,492 28
Charging surplus with annual sinking fund		
amount of \$3,357 96 plus annual interest		
of \$134 32		

These entries would take care of the regular contributions to the sinking fund. However, the corporation frequently desires to show in the balance sheet how its sinking fund is invested. Let us suppose that during the second year of the life of the bonds \$2000 00 were in bonds. The original entry of this investment would be made by the trustee, but the corporation would receive in the annual report of the trustee a record of this investment along with the report of interest earned. The corporation, then, in many cases, divides its sinking fund account into two accounts, one showing the cash and the other the investments. The *sinking fund trustee* account would then be designated as the *sinking fund trustee-cash* account. The following journal entries would set up the second account

(b) Sinking Fund Trustee Bonds	2,000 00	
Sinking Fund Trustee Cash		2,000 00
Investment of trustee in bonds		

The corporation could then show the facts on its annual balance sheet as follows.

Sinking Fund Trustee		
Cash	\$4,850 24	
Bonds	2,000 00	
	<hr/>	\$6,850 24

It is more common, however, to find the two accounts on the balance sheet as follows.

Sinking Fund Cash	4,850 24
Sinking Fund Bonds	2,000 00

**19. Surplus Reserves and Valuation Reserves.** — Certain reservations from earnings are made from time to time for the purpose of offsetting losses in assets. These losses are really expenses of the business and should be charged against the income before the balance earnings could be regarded as the net profits. Depreciations of fixed assets is charged as an expense, but the amount so charged is commonly carried to the credit of a *reserve for depreciation*, as explained in previous chapters, instead of being credited directly to the assets which have depreciated. This depreciation reserve then represents the amount by which the asset is overstated and is called a valuation reserve. The reserve for bad debts similarly should represent the amount by which the valuation of accounts and notes receivable are overstated in the balance sheet and is likewise a valuation reserve. The reserves however, which are made for special purposes other than to offset decreases in assets are surplus reserves. If the assets reserved are set aside in a special fund the reserve is spoken of as a covered reserve. The *sinking fund reserve* and the *reserve for improvements* are surplus reserves. On account of the fact that these surplus reserves are like the regular surplus except that they are not available for dividends it becomes appropriate to retain these surplus reserves on the liability side of the balance sheet and to represent them as follows

Surplus Reserves	
Sinking Fund Reserve	\$
Reserve for Improvements	
Undivided Profits	
Balance Surplus	
Total	\$

However, these special surplus reserves are frequently shown as separate items on the liability side of the balance sheet, being listed as follows

Sinking Fund Reserve	\$
Reserve for Improvements	
Undivided Profits	
Surplus	

**20. Total Proprietary Interest.** — The total proprietary interest of the corporation is represented by the total capital plus the surplus reserves. While the balance sheet frequently shows the capital stock accounts first and the surplus reserves last as representing the balance difference between the assets and liabilities, the original capital being thought of as a type of liability, much is to be said in favor of grouping all the proprietary items together as follows

Proprietorship
Capital Stock
Surplus Reserves
Sinking Fund Reserve
Reserve for Improvements
Undivided Profits
Surplus
 Total

### QUESTIONS AND PROBLEMS

1. What is meant by the net profits of the corporation?
2. The XYZ Corporation has the following balance sheet

<i>Assets</i>		<i>Liabilities</i>	
Plant and Property	750 000 00	Capital Stock	600,000 00
Furniture and Fixtures	20 000 00	First Mortgage Bonds	50,000 00
Merchandise Inventory	75 000 00	Accounts Payable	30,000 00
Cash	15 000 00	Surplus	80,000 00
	<hr/>		<hr/>
	800 000 00		860,000 00

- (a) What is the book value of a share of its stock?
  - (b) On February 15 the corporation declared a cash dividend of 5 per cent, payable March 1, 1921. At the same time it declared a 10 per cent stock dividend payable the same date.
  - (c) On March 1 the dividends are paid. Journalize the entries involved in (a), (b), and (c).
  - (d) At the end of the period the net profits from operation were \$25,000 00. There were set up the following reserves: \$5,000 00 for sinking fund and \$10,000 00 for improvements. Adjustments were made as follows: furniture and fixtures, written down \$500 00, an error of \$750 in plant and property corrected by placing this amount on the books.
- Make out the surplus account and show how it would appear as a part of a profit and loss statement.

(e) The corporation decides to expand its business and consequently authorizes an increase in capital of \$300,000 00, each stockholder having the right to purchase stock equal to 50 per cent of his holdings. The shares were selling for \$125 00 per share, the par being \$100 00. At what price should the rights sell?

3 (a) The GHK Corporation has the following balance sheet

<i>Assets</i>		<i>Liabilities</i>	
Plant and Property	600,000 00	Capital Stock	750,000 00
Furniture and Fixtures	100,000 00		
Cash	50,000 00		
	750,000 00		750,000 00

The stockholders G, H, and K donate pro rata \$150,000 00 of stock to the corporation for working capital. Of this amount 1000 shares are sold at \$75 00 per share, the par being \$100 00. Journalize and set up the balance sheet after the sale.

(b) One year later the corporation sells \$100,000 00 of additional stock to outsiders at \$125 00 per share, the par being \$100 00. Journalize the sale.

(c) It also sells certain parts of plant and property costing \$75,000 00 at \$85,000 00. Journalize the sale and state how the profits and loss account would be closed out at the end of the period.

## CHAPTER XXIX

### CORPORATION RECORDS

1. **Subscription to Stock.** — A subscription blank which would serve the purpose for a prospective subscriber might have a form as follows

#### ILLUSTRATION NO. 28

##### SUBSCRIPTION BLANK

DATE OF SUBSCRIPTION	SIGNATURE OF SUBSCRIBER	ADDRESS OF SUBSCRIBER	NO OF SHARES	AMOUNT
-------------------------	-------------------------	--------------------------	-----------------	--------

The prospective subscriber would be furnished a prospectus along with the subscription blank or prior to his receipt of it. The prospectus would give the names of the incorporators, the nature of the business to be conducted, and such facts and statistics as might indicate the corporate earnings which might be anticipated so that a prospective subscriber might determine for himself whether the prospect for returns on the investment justified the required purchase price. When the subscription blanks are received they might be entered in a subscription book as they are received. The book would have columnar headings similar to those of the subscription blank. This book would serve as a book of original entry for subscriptions. The subscription blanks themselves could also be used as the original entry from which postings would be made to the subscription ledger. If an installment book were used to record the payment of each installment, it might have the following form:







**2. Subscription Ledger.** — The subscribers' account in the general ledger would be carried on ledger paper with ordinary rulings. The subsidiary subscription ledger is sometimes especially ruled somewhat as shown on previous page

The form of ledger illustrated above is one which would be designed to meet the needs of a corporation which received its subscriptions payable on the installment plan. If the individual subscribers' accounts were payable on the installment plan, it would not be necessary to prescribe unusual forms for the subscription ledger. The subscribers' account in the general ledger would represent a controlling account for the subscription ledger. When all of the subscriptions of a given subscriber are paid in full, he would generally receive a stock certificate, but if the stock certificates are not ready for delivery he would generally receive a treasury receipt showing full payment for the stock. This certificate would, in general, be transferable and would carry with it the right to receive a stock certificate when these are ready for issue.

**3. Stock Book Certificate.** — Stock certificates are ordinarily issued in serial numbers. There is a stub on each stock certificate which furnishes all information essential for posting to the stock ledger. On this stub would appear the certificate number, number of shares issued, name and address of holder, date of issue, and from whom transferred. There would also be posted on this stub a receipt or signature of the individual to whom the certificate was issued. The stock certificate ordinarily describes briefly on its face the rights of the holder. A reference to the books on corporation forms will show a variety of inscriptions suitable for the face of a corporation stock certificate. On the back of the certificate there appears a transfer blank which would enable the holder to transfer the share or shares to another. The certificate may be transferred through the signature of the owner, but the original owner continues to be vested with the right to receive dividends until the certificate issued to him is turned in to the company for cancellation. A new certificate is then issued to the purchaser and the old certificate is attached to the stub from which it was originally



taken, as a voucher to indicate its cancellation. The stubs of the stock certificate book should indicate the shares issued and outstanding. This is also indicated on the books of the registrar.

**4. Stock Transfer Book.** — Since shares of stock are freely transferable, it becomes necessary to set up a record showing the transfer so that a correct record may be kept showing the credit to each stockholder in the corporation. This record of the holdings of each stockholder is kept in the stockholders' record in the stock ledger. While the stock certificate book stub could be provided with space to indicate the stock purchaser or purchasers of shares canceled, there is frequently set up a regular stock transfer book. The form of stock transfer book required by the state of New York is shown on previous page.

The following form will serve to indicate the character of inscription found on the face of a stock certificate.

United States of America — Incorporated under the Laws of the State  
of \_\_\_\_\_

Number of  
certificate

Number of  
shares

The \_\_\_\_\_ Company of the State of — — —

This certifies that \_\_\_\_\_ is the owner of \_\_\_\_\_  
shares of stock of the \_\_\_\_\_ Company of the City  
of \_\_\_\_\_ of the state of \_\_\_\_\_, transferable  
only on the books of the Corporation by the holder hereof in person  
or by attorney upon the surrender of this certificate properly en-  
dorsed.

IN WITNESS WHEREOF, the said corporation has caused this  
certificate to be signed by its duly authorized officers and to be  
sealed (Seal) with the seal of the Corporation this the \_\_\_\_th day  
of \_\_\_\_\_, 19\_\_\_\_

Treasurer

President.

**5. Stock Ledger.** — A special form for the stock ledger is frequently found. The following form of entry will serve to indicate the character of record involved.

ILLUSTRATION NO 32

STOCK LEDGER

DR					CR				
DATE	HOW CANCELED	NO SHARES	CERT NO	PAR VALUE	DATE	HOW ACQUIRED	NO SHARES	CERT NO	PAR VALUE
					1915 Apr 1	Original Issue	100	1	\$40,000

## ILLUSTRATION NO 33

## BOND REGISTER

(Left-hand page)

CLASS REGISTERED 1ST MORTGAGE 1925

	No	DATE OF BOND	TO WHOM ISSUED		TRANSFERRED		AMOUNT
			NAME	ADDRESS	NAME	ADDRESS	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
32							
33							
34							

## CORPORATION RECORDS

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(Right-hand page)

[illegible]



**6. Bond Forms.** — Corporation bonds also require regular forms. The bonds are frequently classified from the standpoint of their entry in the books of record as registered bonds and coupon bonds. The coupon bonds are payable to bearer and have attached to them coupons easily removed from the bond form and sent in to the treasurer of the corporation for payment at the respective interest dates. The coupon bond is payable to bearer and no bond register at the offices of the corporation or in the hands of the treasurer is required to record the names of the holders of the outstanding bonds. The registered bond, on the other hand, is transferred on the books of the company just as corporation stocks are transferred. The forms on the two previous pages will indicate the type of bond register which may be used to indicate the holders of outstanding bonds

The bond register used for coupon bonds is one which shows the canceled coupons which are attached to the register. The amount of interest coupons not paid will be indicated by the spaces on the bond register not covered by canceled coupons. The coupon bond register form may be as follows

ILLUSTRATION NO 34

COUPON BOND REGISTER

UNITED STATES BOND AND MORTGAGE COMPANY  
BOND REGISTER

\$1,000 00		8½ TRUST BOND
<i>Dated Jan 1, 1916</i>	<i>Due Jan 1 1926</i>	<i>First Coupon Due July 1, 1916</i>
	14	7
20	13	6
19	12	5
16	9	2
15	8	CANCELLED COUPON

There is no indication on this register as to the name and address of the holder of the coupon bond.

A combination of coupon and registered bonds is sometimes used. The principal of the bond is transferred and recorded in a register similar to the left-hand page of the bond register illustrated above. No provision, however, would be needed for interest payments except that shown in the coupon bond register illustrated above. In other words, the right-hand side of such a bond register page would be the coupon register, instead of an interest record.

**7. Dividend Book.** — The dividend book of a corporation is used for the purpose of making out a list of stockholders for each dividend declaration. The spaces provided for on the dividend book page would be as follows:

- a Name of stockholder
- b To whose order check should be drawn if different from that of stockholder
- c Mailing address
- d Number of shares
- e Amount of dividend paid
- f Number of check issued in payment

At the head of the list a memorandum would indicate the rate of the dividend declaration. There are other special forms and records used in connection with the corporation but those cited above will serve to indicate the character of special records required for the corporation. The student will readily see the relation between the books of original entry and the ledgers described above. An acquaintance with the purpose of these records as set forth in the description of corporate accounts in a preceding chapter will carry with it sufficient directions for the use of the corporate forms.

## CHAPTER XXX

### COST ACCOUNTS AND TYPES OF COST ACCOUNTING

**1. Accounting Problems of a Factory.** — A factory may engage in the business of trading and selling its own products or it may furnish its output entirely to a selling organization so that the two enterprises are distinct units from the standpoint of management. Such an organization would involve a separation of cost into factory cost and selling cost. Even where the two functions are under the control of the same management they are ordinarily under the supervision of separate departments and consequently the same grouping of cost data is found advisable. The selling costs and their classification for a factory do not differ materially from the classification of selling costs already described in connection with the trading business.

**2. Factory Costs.** — The cost of manufacturing is ordinarily divided into two classes of items. (a) prime costs and (b) indirect expense. Prime costs consist of the wages of labor devoted directly to manufacturing operations plus the cost of materials used in manufacturing. Indirect expense includes all other expenses of manufacture.

**3. Significance of Direct Labor Cost.** — There is no factor in modern production which has given more concern to factory managers than the direct labor item. When costs of production have been greatly reduced the reduction has been generally concerned mainly with the reduction in the cost of labor. The more enlightened managers have set up the program of increasing wages of individual laborers and of reducing, at the same time, the cost of labor required to perform manufacturing operations. This can only be achieved by so standardizing and supervising the work to be done that time will be saved. If several operations are involved it may be desirable to set up a

direct labor account for each of two or more divisions of the factory work required to produce a given commodity. In some cases the factory work is departmentalized and an account for direct labor may be required for each department. Still another labor cost program requires a record of the direct labor for each job of work performed. This form of charge is used when factory production goes forward on the job order basis. In some instances, however, the direct labor record goes even to the point of showing the direct labor cost of each operation involved in factory production. Much of cost accounting work is concerned with recording and assembling data showing the cost of labor. It is one of the principal problems of any cost accounting program.

**4. Material Costs.** — The recording of material costs is attended with less complexity. It is not difficult to keep a material account showing the cost of all materials going into the production process. It is frequently true that all the material is properly chargeable to the product in one account showing the total material cost of producing a commodity. If more than one material is used in production there may be more than one material account. If there are departments one or more material accounts may be required for each department.

**5. Indirect Expense.** — In the fields of factory production where material costs are a large fraction of total costs, indirect expense is usually small and no intricate or refined system is required for properly charging indirect expense if it becomes necessary to apportion it between departments or separate divisions of work. However, the direct and indirect labor cost tend in many lines of factory production to constitute a large fraction of total cost. In such cases indirect expense is generally a large fraction of total cost. A large investment in fixed assets tends to increase further the indirect expense. When indirect expense becomes large any considerable error in its distribution may render the cost data of little value. Much of modern cost accounting is concerned with a study of means by which an accurate distribution of indirect expense may be made according to the extent to which it is occasioned by the

several operations, processes, departments, or commodities which may be the subject of cost-finding.

**6. Types of Cost Systems.** — The more important types of cost systems are (a) the estimating cost system and (b) job cost systems, which include those employing the machine rate as a means of distributing indirect expense and those employing other methods for this purpose. The estimating cost system may be carried on for a plant as a whole or the classification of costs may be by departments. The subject of the cost-finding may be a commodity, or certain operations on the commodity. The job cost system of accounting is applicable to a plant doing a miscellaneous type of foundry and machine work largely on orders coming from customers, and opens the possibility for accurate and dependable cost-finding. The estimating cost system is commonly used when approximate costs can be secured in that way provided the less accurate results prove sufficient for the managerial needs of the factory.

**7. The Estimating Cost System and the Job Order System.** — If a job order system prevails all factory work must be done on the basis of a job order prepared under the supervision of a superintendent of factory operations. The job orders may be prepared by a production clerk, a production engineer, or some other officer charged with the duty of arranging a production program. The use of the job order requires ordinarily the following provisions: (a) a storeroom with a perpetual inventory of raw materials, (b) a daily record showing the job or jobs to which the labor of each workman is chargeable, (c) a daily record of the issue of all material from stock showing the job to which such material is chargeable, (d) a system of apportioning overhead expense to the respective jobs so that a ledger record in the form of a job order sheet may be prepared for each job showing its cost at the time of its completion.

In the case of the estimating cost system, however, the situation is quite different. The simplest situation would be that in which there are just three accounts: (a) direct labor; (b) direct material; and (c) indirect expense. All expenditures made on the manufacturing process would be charged against one of

the three accounts named. The sum of the debit balances of these three accounts should show at all times the total expenditures incurred in the manufacturing process. The question arises as to whether this sum would represent an accurate cost of goods manufactured. It would represent with a fair degree of accuracy the total cost of goods in process of manufacture plus the cost of finished goods. The difficulty would arise in the separation of the expense chargeable to finished goods from that chargeable to goods in the process of manufacture but not yet finished.

This separation of the cost of finished goods from that of unfinished goods takes place when an inventory is taken. This separation must take the form of an estimate. There are no records which would serve to make this estimate accurate. As the processes of manufacture become more involved this estimate becomes less accurate and the estimating cost system becomes less satisfactory. There would be no difficulty in making this separation for a job cost system. The cost sheet would show the cost of finished work when the work was completed. All expenses charged to jobs under the several account titles would constitute subsidiary accounts under the general controlling caption of *work in process*. In the job order system the work in process account balance is the sum of the debit balances of all job order accounts or job order sheets. But in the estimating cost system it is necessary to determine by estimate the amount of expenditure on uncompleted work. Since this estimate can be an approximation only, the cost of finished stock can also be only an approximation because it is arrived at by subtracting the work in process estimated item from the total charges to the manufacturing process in the manufacturing account.

This text is concerned only with a simple case of the estimating cost system. The more general accounts involved in the estimating cost system are about the same as those employed in all of the cost accounting programs. Moreover, the voucher register, which is generally used as a means of distributing items to the several expense accounts in the estimating cost system, has a wide application to many other cost

accounting programs. A simple estimating cost system serves, therefore, as a suitable means of introducing the general subject of cost accounting.

**8. Cost Accounts.** — It was pointed out above that the principal accounts are direct labor, direct material, and indirect expense. In the job cost system the cost sheet commonly shows both the direct labor and direct material in separate columns. There is substantially a separate direct labor account for each job, although no formal ledger account may be opened except for the general direct labor control. Exactly the same thing may be said for the material accounts and the general material control account. In the estimating cost system there might be two or more direct labor accounts corresponding to the several departments or the several divisions of the work involved in manufacturing. There might be the same number of material accounts or there might be only one material account for the several divisions of the work. In the estimating cost system as well as in other cost accounting programs the *indirect expense* is usually the caption of a group of accounts instead of being an account title. Some of the more common indirect expense accounts are as follows: (a) shop supplies, (b) heat, light, and power used in manufacture, (c) factory repairs, (d) factory insurance, (e) administrative salaries, (f) administrative expense, (g) depreciation of machinery, and (h) depreciation of building.

One of the characteristics of factory accounting as contrasted with the small retail establishment lies in the large number of accounts to which charges must be made.

**9. Manufacturing Account.** — The manufacturing account bears the same relation to the factory accounts that the trading and profit and loss accounts bear to the accounts of the trading business. It is the closing account into which the various expense items are grouped for the purpose of arriving at the total cost of manufacturing finished goods.

The following skeleton of a manufacturing account indicates the detailed accounts closed into manufacturing at the time of closing the books:

## MANUFACTURING ACCOUNT

Raw Material Inv First of Period	Raw Material Inv. End of Period
Goods in Process First of Period	Goods in Process End of Period
Materials Purchased	Shop Supplies Inv End of Period
Direct Labor	Manufacturing Cost Car- ried Down
Indirect Labor	
Frt on Mat Purchased	
Cartage on Mat Purchased	
Shop Supplies	
Heat and Power Used for Mfg	
Misc Fac Expense	
Repairs to Mch and Tools	
Factory Insurance	
Depreciation	
Mfg Machinery	
Mfg Building	
Other Mfg Equip	
Taxes on Mfg Property	

If it were desired to get a correct figure for direct labor per unit of finished product, a direct material cost per unit of product, and an indirect expense per unit of product, it would become necessary to divide the process account as follows

Goods in process, direct labor

Goods in process, direct material

Goods in process, indirect expense (This account includes as a total all accounts other than direct labor and material)

In setting up the respective accounts at the beginning of a subsequent period the following journal entry should be made:

Direct Labor

Direct Material

Indirect Expense

    Goods in Process

Charging the goods in process to the several  
cost accounts.



It is clear, therefore, that when unit costs are employed the goods in process item would appear in the beginning of the period as the total of the charges to direct labor, material, and indirect expense. The goods in process items, even at the end of the period, should preferably be entered as credits to the direct labor, direct material, and indirect expense accounts, if unit costs are to be calculated. The entry would be as follows:

Goods in Process	Inv
Direct Labor	
Material	
Indirect Expense	

The balances of the direct labor account, the direct material account, and the indirect expense account would then be the expenditures on these accounts for finished goods, and the balance of the manufacturing account would be the cost of finished goods. In this discussion all of the indirect expense accounts have been treated as a total for brevity. In practice a unit cost for each of these items would require that it be treated just as the direct labor and direct material accounts were, the respective accounts being credited at the time of closing with so much of the item as might be chargeable to the goods in process inventory.

The journal entry involved in closing the several accounts into the manufacturing account are similar to those involved in closing the accounts of a trading firm into the trading and profit and loss accounts. The closing entries can be abbreviated in the same way by compound entries.

The balance of the manufacturing account is brought down to the trading account by the following journal entry:

Trading — Mfg Cost	
Manufacturing — Mfg Cost	.
Bringing down the balance of the manufacturing account to trading	.

The journal entries involved in the trading account can be readily supplied by observation of the following skeleton of the account:

## TRADING

Mfg Cost	Finished Stock Sales ..
Fin Stock, First of Period	Fin Stock Inv End of
Fin Stock Purchases	Period . . .
Frt in on Fin Stock Purchases	
Gross profit	

The gross profit balance is then brought down to profit and loss and the closings into profit and loss are made as set forth in preceding chapters

Paragraphs 10, 11, and 12 may be omitted for first-year students. This would also involve the omission of No 12 in Problems and Questions at the end of the chapter. The paragraphs are necessary, however, for a complete understanding of the simplified cost systems which rely upon a voucher register for the distribution of cost expense.

**10. Estimating the Goods in Process.** — In order to set up some standard cost data and facilitate the inventory of goods in process an estimate is frequently made showing the expected cost of a product to be manufactured. This estimate is analyzed into the cost of the separate operations to be performed on the commodity so as to show direct labor, direct material, and indirect expense for each operation.

Suppose, for example, the unit cost of a commodity A were estimated as follows:

TABLE XXX-A

## ESTIMATED OPERATION UNIT COSTS

	TOTAL COST	OPERATION No 3	OPERATION No 2	OPERATION No 1
Material	\$3 00	\$3 00		
Direct Labor	1 00	50	20	.30
Indirect Expense	50	.25	10	.15
Totals	\$4 50	\$3.75	30	.45

It would be possible by test performances of these separate operations and by comparing the result with experience records in bulk production to set up a standard unit cost estimate which would be applied to the work in process in various stages of production so that the inventory might be made

Let us suppose, further, that at the end of a month 10,000 units of commodity A have been completed, 1000 additional completed through Operation No. 1, and 500 additional through Operation No. 2. The additional items are work in process. On the basis of the estimated costs the following would be the work in process inventory

TABLE XXX-B

WORK IN PROCESS ON THE BASIS OF THE ESTIMATED OPERATION  
UNIT COSTS

	Oper #1	Oper #2	Total
Direct Material	\$3,000 00		\$3,000 00
Direct Labor	500 00	\$100 00	600 00
Indirect Expense	250 00	50 00	300 00
	\$3,750 00	\$150 00	\$3,900 00

If the estimates had all been correct, the total expenditures to date would be as shown in the table on the following page:

TABLE XXX-C  
TOTAL MANUFACTURING COSTS ON THE BASIS OF THE ESTIMATED OPERATION UNIT COSTS

ITEMS	OPERATION No 1			OPERATION No 2			OPERATION No 3			ALL OPERATIONS
	No UNITS	COST PER UNIT	Est Cost	No UNITS	Est Cost PER UNIT	Est Cost TOTAL	No UNITS	COST PER UNIT	Est Cost	
Direct Material	11,000	\$3 00	\$33,000 00	10,500			10,000			\$33,000 00
Direct Labor . .	11,000	50	5,500 00	10,500	20	\$2,100 00	10,000	30	\$3,000 00	10,600 00
Indirect Expense .	11,000	25	2,750 00	10,500	10	1,050 00	10,000	15	1,500 00	5,300 00
Totals . . .	11,000	\$3 75	\$41,250 00	10,500	30	\$3,150 00	10,000	45	\$4,500 00	\$48,900 00

But the voucher register may be supposed to show the following expenditure after due elimination of materials on hand which have not been placed into factory process:

TABLE XXX-D

ACTUAL TOTAL MANUFACTURING COSTS INCLUDING WORK IN  
PROCESS TAKEN FROM FINANCIAL RECORDS

Direct Material	\$32,500 00
Direct Labor	11,000 00
Indirect Expense	5,600 00

This would be regarded as proof that the estimates were approximately correct. Yet the material unit estimate was too high by 500 '33,000 or 15 cents per unit of estimated cost. The labor estimate was slightly too low because the expenditure on the estimated basis was less than the actual expenditure. The same would be true of indirect expense. These facts may be verified by comparing Table XXX-D with the All Operations column of Table XXX-C.

It would not be possible to get the actual cost per unit for each operation unless we assume that the direct labor, direct material, and indirect expense costs for the actual expenditures are in the same proportion as between the three operations as they are found to be in the case of the estimated expenditures. This assumption is not unreasonable, however, since the estimated costs are usually set up on the basis of job cost data taken for sample batches of items run through the factory under a job cost accounting analysis. The job cost analysis may be applied to a sufficient number of batches to satisfy the management that representative data have been secured for the estimate. Of course no accurate costs can be found by the use of the estimating cost system. But the original estimate will at least be subject to correction for a closer approximation on the basis of the total costs when it is found that the total costs on the estimated basis do not agree with the total costs as taken from the financial records which show the actual ex-

TABLE XXX-E  
DISTRIBUTION OF ACTUAL COSTS FOR THE SEVERAL ITEMS TO THE RESPECTIVE OPERATIONS,  
AND REVISED UNIT COSTS

ITEMS	TOTAL	OPERATION No 1 Totals	%	OPERATION No 2 Totals	%	OPERATION No 3 Totals	%
Material Estimate . . . . .	\$33,000 00	\$33,000 00	100				0
Material Actual	32,500 00	32,500 00	100				0
Direct Labor Estimate	10,600 00	5,500 00	51 9	\$2,100 00	19 8	\$3,000 00	28 3
Direct Labor Actual .	11,000 00	5 709 00	51 9	2,178 00	19 8	3,113 00	28 3
Indirect Expense Estimate	5,300 00	2,750 00	51 9	1,050 00	19 8	1,500 00	28 3
Indirect Expense Actual	5,600 00	2,905 40	51 9	1,108 80	19 8	1,594 80	28 3
Number of Items (see Table XXX-C) Unit Costs		11,000 00		10,500 00		10,000 00	
Material Actual . . .	2,955 00	2,955 00					
Direct Labor Actual . . .	1,037 00	519 00		207 00		311 00	
Indirect Expense Actual . .	529 00	264 00		106 00		159 00	
Total Unit Costs . .	\$4,521 00	\$3,738 00		\$313 00		\$470 00	

penditures for direct labor, direct material, and indirect expenses. If we now divide the actual cost totals between the three operations for the three items on the same percentage basis as they are found to be divided in the estimated cost table on p. 419, we will have the table as shown on the previous page.

When one has taken the inventory by the use of the estimated costs the question arises as to whether the estimates have any other useful purpose. It is obvious that the Unit Costs found in Table XXVI-E could be used in closing the manufacturing account and in setting up the work-in-process inventory. The total estimated costs need not even be entered in the books of original entry. They serve their purpose in indicating how to distribute actual cost data between the several operations.

**11. Journal Entry of Estimated Cost Data.** — There may be an advantage, in some cases, in entering the estimated cost data in the journal and later correcting the estimated entries before the final closing of the books. There are two items of data which can be secured by this practice. The total direct labor, direct material, and indirect expense might be charged weekly or daily to manufacturing. If the manufacturing account is credited with the cost of finished stock on the basis of the estimated unit costs, then the daily or weekly balance of the manufacturing account would show to the management the approximate cost to date of all work in process. At the same time, however, the manufacturing account would be credited with the cost of finished stock under the account caption of *manufacturing cost*. This account would be debited with the same figure. This would show the total approximate cost of all finished stock. This cost less cost of finished stock sold would show an approximate inventory of finished stock daily or weekly, as the case might be. Assuming, therefore, that the estimated costs are entered in the financial records, let us see how the cost data referred to above would be shown.

When the 10,000 items had been finished the following journal entry would be made:

(a) Manufacturing Cost	48,000 00	
Direct Materials		33,000.00
Direct Labor		10,000.00
Indirect Expense		5,000 00

(See Table XXX-A above for unit costs)

The debits to the direct material, direct labor, and the indirect expense accounts would be from the financial books showing the expenditures under these captions. The sum of the balances of these several accounts would show the work in process total. This would produce an estimated cost of work in process.

When manufacturing cost is thus entered on the estimating cost basis, then the balance of the manufacturing account becomes the cost of work in process instead of the manufacturing cost, which was shown as the balance in the illustration of the manufacturing account given in paragraph 9 above.

If it were desired at the end of the month to close the books without taking an actual inventory of work in process, a trial balance might be taken and the estimated net profits worked out through the use of the estimated cost units. If this program were adopted there would be a use of the estimated cost data in connection with sales.

Let us suppose that the 10,000 units referred to represented the output for January and the sales for the same month had been 9000 items. The entry of this item can be made by reference to the data in Table XXX-A as follows:

(b) Trading — Cost of Sales		
(at \$4.50 per unit)	40,500 00	
Manufacturing Cost		40,500 00

If we suppose the 9000 items to be sold on time at \$6.00 per item, the entry would be as follows:

(c) Accounts Receivable (Detailed)	54,000.00	
Trading — Sales		54,000.00

The indirect expense can be closed into profit and loss and show the estimated net profits after the gross profits have been calculated.



## TRADING

Manufacturing Cost	40,500 00	Sales	54,000 00
Gross Profits	<u>13,500 00</u>		
	54,000 00		54,000 00

The general indirect expense other than the factory indirect would be shown by the financial records. This would include the selling expenses and general administrative expenses. These would be charged to the profit and loss, which would also be credited with the gross profits. The balance of the account would show the net profits on the basis of the estimated cost data.

**12. Journal Entries to Correct Estimated Figures.** — It was pointed out in the preceding paragraph that in practice, the monthly profit and loss statement might be made five months in succession without an inventory by count, the costs and inventory taken on the basis of the estimated unit costs being relied upon. At the end of the sixth month a statement would be made in most cases for the entire six months and the book inventory would be checked with the actual inventory by count. At such a time the unit cost data would also be revised as indicated in the preceding paragraph.

For the purpose of abbreviating the discussion let it be supposed that the estimated data are corrected for the month of January for which entries were made in the preceding paragraph. The final items to be corrected are the *cost of sales* item and the *inventory of finished stock*. Then a revised profit will result. Now let us compare the estimated and the actual data for the 10,000 completed items as shown on the next page:

TABLE XXVI-F

## DIFFERENCES OF ACTUAL AND ESTIMATED COST ITEMS

	ACTUAL (SEE TABLE 26-F)	ESTIMATED (SEE TABLE 26-A)	EXCESS (+) OR SHORTAGE (-) OF ESTIMATE
Material	\$29,550 00	\$30,000 00	+ \$450 00
Direct Labor	10,037 00	10,000 00	- 37 00
Indirect Expense	5,290 00	5,000 00	- 290 00

The original entry for the estimated data shown above was as follows

Finished Stock	48,000 00	
Material		33,000 00
Direct Labor		10,000 00
Indirect Expense		5,000 00

But the items are in error and hence the balances for work in process from the several accounts will be in error. However, the estimated items can be brought to the actual balances by the following correcting entry in the journal.

Material	450 00	
Finished Stock		123 00
Direct Labor		37 00
Indirect Expense		290 00

Entry to correct the balances of the several accounts resulting from entry of estimated data

When the original material account was credited with \$30,000 00 instead of \$29,550 00, the balance of this account was reduced excessively by the \$450 00. Likewise direct labor account was left with a balance of \$37 00 too much because of the credit of \$10,000 00 when \$10,037 00 should have been credited. Likewise the indirect expense balance was left with too large a balance. The correcting entry, however, brings all the estimated account balances into accord with the actual

figures taken from the financial record. The error in finished stock would of course be the net error of \$123.00 as shown by the above table. The several accounts with all the corrections would now stand as follows:

## MATERIAL

Jan 31	32,500 00	Jan 31	30,000 00
31	<u>450 00</u>	31 Balance	<u>2,950 00</u>
	32,950 00		<u>2,950 00</u>
Feb 1 Balance	2,950 00		

## DIRECT LABOR

Jan 31	11,000 00	Jan. 31	10,000 00
	<u>11,000 00</u>	31	37 00
		31 Balance	<u>11,000 00</u>
Feb 1 Balance	11,000 00		<u>11,000 00</u>

## INDIRECT EXPENSE

January 31	5,600 00	January 31	5,000 00
	<u>5,600 00</u>		200 00
February 1 Balance	310 00	Balance	<u>5,600 00</u>

The sum of the balances of the three accounts would give the corrected work in process account, the total being \$4223 00 which is \$323 00 in excess of the work in process on the basis of the estimated unit cost (Table XXX-B).

Before giving the revised finished stock and sale accounts it will be necessary to make a journal correction for the entry of the sale of 9000 items credited to finished stock on the estimated basis. The revised unit cost (Table XXX-E) was \$4.521, so that the revised credit for the sale of 9000 items would be \$40,689.00 instead of \$40,500.00, the old credit showing a shortage of \$189.00. The correcting entry would be:

Sales — Cost of Sales	189 00
Manufacturing Cost	189 00
Correcting entry for credit to finished stock on estimated basis	

### MANUFACTURING ACCOUNT

Jan 31	Direct Materials	2,050 00	Jan 31	Work in Process	4,223 00
	Direct Labor	963 00			
	Indirect Exp.	310 00			
		<u>4,223 00</u>			<u>4,223 00</u>
Feb 1.	Balance Work in Process	4,223 00			

### MANUFACTURING COST

Jan 31	Direct Materials	33,000 00	Jan 31	Cost of Sales	40,500 00
	Direct Labor	10,000 00		Correction	189 00
	Indirect Exp	5,000 00		Correction	123 00
		<u>48,000 00</u>		Balance Mfg Cost	7,188 00
					<u>48,000 00</u>
Feb 1	Balance Finished Stock	7,188 00			

### TRADING (JANUARY)

Cost of Sales	40,500 00	Sales	54,000 00
Error in Est	189 00		
Gross Profits	13,311 00		
	54,000 00		54,000 00

These entries bring the estimated figures into accord with the actual financial figures of the journals and hence these latter data are not posted. They are simply used as a basis of correcting the estimated data

**13. The Distribution of Indirect Expense.** — If exactly the same operations or series of operations are performed on each item of factory product, the indirect expense can be appor-

tioned accurately by charging the same amount to each unit of product. Practically all manufacture proceeds on the basis of estimated costs with also an estimated amount of indirect expense. The voucher record with a monthly closing of the books would indicate each month the extent to which the actual indirect expenses exceeded the estimate. There are two other types of distribution of indirect expense frequently resorted to in the simpler types of manufacture. In the one, a percentage of direct wages is added to cover indirect expense, in the other, indirect expenses are distributed on the basis of the number of hours of direct labor involved in the productive processes concerned. When the wages of direct labor are comparatively uniform, and the amount of investment in machinery comparatively small, it frequently happens that the cost of supervision and the other indirect expenses may be fairly apportioned by either of these two methods. It is usually necessary, however, to classify the indirect expenses into a variety of accounts to be distributed to the departments or products by different methods. For example, the cost of heating might be fairly distributed to departments on the basis of floor space or cubical content of the rooms. Power and light costs are frequently distributed on the basis of the capacity of the electric fixtures in the various departments. There are other indirect expenses such as depreciation, interest, and taxes which would be distributed to the various departments on the basis of the investment involved in their operation. One must analyze for each type of indirect expense the basis upon which it may be occasioned in various productive processes carried on in the factory. The distribution of indirect expense through a machine rate is another method used in cost accounting, but its treatment is outside the scope of a general text.

**14. Cost Terminology.** — In this chapter a selection of terms has been made and they have been used as if there were no other conflicting usage. The term *productive labor* is frequently used instead of direct labor. The term *unproductive labor* is also used instead of the term *indirect labor*. The terms *overhead expense* and *burden* are widely used instead of factory in-

direct expense Indirect expense may be used without qualification, as in this chapter, provided only factory cost is under discussion But trading and selling costs are also indirect expense When the costs of the entire factory enterprise are under discussion the indirect expenses of the factory should be designated as *factory indirect expense* to distinguish them from the general administrative and selling expenses, which are also indirect expenses The latter group of indirect expenses may be designated as *general indirect expenses*

### QUESTIONS AND PROBLEMS

- 1 What are the principal divisions of factory cost?
- 2 With what items are modern factory problems chiefly associated?
- 3 What divisions are sometimes found in the direct labor account? How is the number of such accounts determined?
- 4 What determines the number of material accounts to be kept?
- 5 What circumstances of factory production cause large indirect expense?
- 6 Contrast the estimating cost system with a job order system Discuss the type of factory to which each is suited
- 7 (a) How is the *work in process* account set up in the estimating cost system?  
(b) In a job order system?
- 8 What are the means adopted to aid in the estimate of work in process?
- 9 Suppose factory operations to be duly efficient and properly standardized, how would erroneous estimate cost data be corrected?
- 10 Describe the content and use of the manufacturing account
- 11 Make the journal entries necessary to close the accounts of the American Manufacturing Co from the trial balance and adjusting entries below Make the manufacturing account, trading account, surplus account, profit and loss account, and balance sheet

The American Manufacturing Co, a corporation, manufactures patented pump jacks It also deals in engineers' supplies A trial balance of the general ledger, June 30, 1908, disclosed the following conditions

Land	20,000 00	
Buildings (cost, July 1, 1907)	64,000 00	
Reserve for Depreciation—Building		1,600.00
Real Estate Mortgage		24,000 00
Machinery and Tools	52,000 00	
Reserve for Depreciation—Machinery and Tools		2,600.00
Horses and Wagons	• 3,400 00	
Furniture and Fixtures	600 00	
Patents	16,000 00	

Inventories, January 1, 1908		
Raw Materials	25,200 00	
Goods in Process	16,100 00	
Pump Jacks (Finished Goods)	42,040 00	
Engineers' Supplies	28,620 00	
Notes Receivable	20,000 00	
Accounts Receivable	96,000 00	
Cash	4,440 00	
Notes Payable		24,000 00
Accounts Payable		65,100 00
Capital Stock		200,000 00
Treasury Stock	30,000 00	
Surplus		44,160 00
Raw Material Purchases		67,300 00
Freight — Raw Material Purchases	5,240 00	
Productive Labor	77,820 00	
Non-productive Labor	21,800 00	
Superintendence — Factory	7,000 00	
Heat, Light, and Power	55,220 00	
Shop Supplies	2,380 00	
Miscellaneous Factory Expense	1,640 00	
Cartage	3,200 00	
Stable Expense	1,660 00	
Insurance — Factory Building and Stock	1,860 00	
Repairs to Buildings	820 00	
Repairs to Machinery and Tools	720 00	
Advertising	10,520 00	
Taxes	1,000 00	
Salesmen's Salaries	7,500 00	
Salesmen's Traveling Expenses	6,420 00	
Rent—Warehouse	1,800 00	
Insurance—Warehouse Stock	2,280 00	
Pump Jacks Sales		284,080 00
Pump Jacks Return Sales and Allowances	7,700 00	
Engineers' Supplies, Sales		80,810 00
Engineers' Supplies, Return Sales and Allowances	2,820 00	
Engineers' Supplies, Purchases	54,100 00	
Office Salaries	9,000 00	
Stationery and Printing	550 00	
Postage	840 00	
Miscellaneous Office Expense	620 00	
Rent—Office Building	1,200 00	
Legal Expense	500 00	
Bad Debts Written Off	660 00	
Interest	1,840 00	
Discount on Sales	5,460 00	
Discount on Purchases		3,520 00
	<u>729,870.00</u>	<u>729,870.00</u>

Close the books, taking into consideration the following.

Unexpired Insurance — Factory Building and Stock	640 00
Unexpired Insurance — Warehouse Stock	940 00
Accrued Taxes Estimated	600 00
Accrued Interest on Notes Payable	560 00
Accrued Interest on Notes Receivable	300 00
Inventories, June 30, 1908	
Raw Material	28,240 00
Goods in Process	17,820 00
Pump Jacks (Finished Goods)	46,640 00
Engineers' Supplies	27,320 00

The cartage and stable expense and depreciation on horses and wagons to be charged one half to Manufacturing and one half to Selling account. The taxes are to be charged three fourths to manufacturing and one fourth to profit and loss.

Create reserve for depreciation on buildings at the rate of 5 per cent per annum, on the original valuation.

Create reserve for depreciation on machinery and tools at the rate of 10 per cent per annum on the diminishing value.

Write off depreciation for horses and wagons at the rate of 20 per cent per annum.

Write off depreciation for furniture and fixtures at the rate of 10 per cent per annum.

Patents expire 10 years from January 1, 1908.

Create a reserve for doubtful accounts, \$1500 00.

The directors declared a dividend on June 1, 1908, of 5 per cent on the outstanding capital stock, payable July 15, 1908, for which no entry had been made on the books.

Prepare necessary journal entries giving effect to the foregoing, also entries closing the books through the manufacturing, the trading, and the profit and loss accounts. Make a manufacturing account, trading account, profit and loss account, surplus account, and balance sheet. Make all closings through the journal.

12 A foundry produced annually a large output of cast iron lamp posts of a given dimension. The operations involved included (1) preparation of metal for molding, (2) moulding, and (3) clipping and finishing. The estimated unit cost of the lamp posts was as follows:

	TOTAL	OPERATION No 1	OPERATION No 2	OPERATION No 3
Direct Labor . . . . .	1 75	50	1 00	25
Material . . . . .	5 00	4 00	1 00	
Indirect Expense . . . .	1 25	65	40	20
Totals . . . . .	8 00	5 15	2 40	45



(a) In the month of January, 1921, the foundry produced 5000 finished lamp posts and put 500 others through Operation No. 1, and 300 through Operation No. 2. There were sold during the month 4000 lamp posts on 60 days' time at \$12.00 each. The financial records showed the following expenditures:

Direct Labor	\$10,000.00
Materials	28,000.00
Indirect Expense	6,500.00

Make out the following accounts on the basis of the estimated data: (1) direct labor, (2) materials, (3) indirect expense, (4) finished stock, (5) cost of goods sold, (6) sales, (7) profit and loss, assuming that sales expense is 5 per cent of factory cost.

(b) In the month of February the output was 7000 lamp posts and the sales at the same price were \$7,500.00. At the end of February there were on hand 500 of finished stock, 600 items finished through Operation No. 1, and 400 finished through Operation No. 2. During the month of February the increases in the three financial account balances were as follows:

Direct Labor	\$11,500.00
Material	35,000.00
Indirect Expense	9,000.00

Make out the same accounts for the two months together on the basis of the estimated cost data as those made out in (a) above.

(c) Revise the unit cost data on the basis of the financial records.

(d) Make a corrected journal and ledger closing for the several accounts involved in (a) and (b) and also a revised set of unit costs.

## CHAPTER XXXI

### THE MANUFACTURING PROFIT AND LOSS STATEMENT

**1. Comparison of Manufacturing Statement to Trading Statement.** — The uses of a profit and loss statement of a manufacturing business and those of a trading statement for a mercantile business are similar in character. The manufacturing business frequently does also a trading business in addition to the production of goods. It may not sell its products to the final consumer and consequently may have only a small trading organization. The trading section of the profit and loss statement of a manufacturing business is essentially the same as the revenue statement of a trading business. The treatment of a manufacturing statement, therefore, is concerned mainly with the treatment of that section of the statement involved in the explanation of manufacturing costs. A successful operation of a factory from the standpoint of the production of a high grade product at a low cost would not, necessarily, insure a successful business. If the provision for the sale of the product were unsatisfactory, the concern might fail either by reason of manufacturing the wrong product or by reason of inefficient methods of selling the product which has been produced. Moreover, the management of a factory is frequently committed to a superintendent and his advisory staff with only a very general supervision from the financial and selling organization. It is possible, therefore, to make the statement of the results of operation so far as factory production is concerned somewhat distinct from the profit and loss aspect of the business operations. Factory production is unsuccessful in carrying out the production of a product in accord with specification unless this production is carried out at a reasonable cost. It might be entirely successful from the standpoint of the factory manager

without the product's being sold at a profit. In the profit and loss statement of the factory, therefore, the question of unit costs of production becomes an important item of information. The manufacturing section of a profit and loss statement will possibly secure better results if it is made preliminary to the trading profit and loss statement instead of being thrown into the trading statement as a subhead. Ordinarily the first step in the formation of a trading statement would be to make the profit and loss statement for the period under consideration. The interpretation of this statement might then require additional information and comparative data. The following form of statement will serve to indicate the initial draft of a manufacturing statement which would serve the purposes of a factory relying mainly on the voucher record for cost data.

## ILLUSTRATION NO 35

FORM FOR REVENUE STATEMENT MANUFACTURING AND  
MERCHANDISING BUSINESS COMBINED

## MANUFACTURING STATEMENT

## Prime Cost

## Materials.

Inventory (Beginning)	....	
-----------------------	------	--

Purchases		
-----------	--	--

Deduct: Returns		
-----------------	--	--

Net Purchases	_____	
---------------	-------	--

Add. Freight-In		
-----------------	--	--

Cost Materials Purchased	_____	....
--------------------------	-------	------

Materials to be Accounted for		..
-------------------------------	--	----

Deduct: Inventory (End)		....
-------------------------	--	------

Materials Consumed		....
--------------------	--	------

Direct Labor		....
--------------	--	------

Total Prime Cost		....
------------------	--	------

## MANUFACTURING PROFIT AND LOSS STATEMENT 435

### Manufacturing Expense

Indirect Labor	. . .
Factory Supplies	
Inventory (Beginning)	..
Purchases	

Total Factory Supplies  
Deduct   Inventory (End)

Factory Supplies Consumed  
Repairs  
Heat, Light and Power (Factory)  
Taxes — Factory  
Insurance — Factory  
Depreciation on  
    Factory Buildings  
    Factory Fixtures  
    Machinery and Tools  
    Patents, etc

Miscellaneous Factory Expense  
(All other items of factory expense  
    are treated similarly )

Total Manufacturing Expense

Total Manufacturing Cost  
Add   Inventory Goods in Process (Beginning)

Total  
Deduct   Inventory Goods in Process (End)

Manufacturing Cost of Goods Completed <sup>1</sup>

## TRADING AND PROFIT AND LOSS STATEMENT

### Trading Section

Manufactured Goods	
Gross Sales	....
Deduct   Returns	

<sup>1</sup> This form can be adapted with variations to all ordinary manufacturing businesses. The items listed and the inventories to be considered will vary, but the principles to be followed in the statement form are unvarying.

Net Sales

Inventory Completed Goods (Beginning)

Cost of Goods Manufactured

(Brought down) ——

Total Manufactured Goods to be  
accounted for

Deduct Inventory Completed Goods  
(End) ——

Cost of Manufactured Goods Sold

Gross Profit on Manufactured Goods

Purchased Merchandise

Class one (Furniture or whatever sort of mer-  
chandise is sold)

Gross Sales

Deduct Returns ——

Net Sales

Inventory (Beginning)

Purchases

Deduct Returns ——

Net Purchases

Add Freight-In

Cost of Purchases

Total (Furniture) to be accounted for

Deduct Inventory (End)

Cost of (Furniture) Sold

Gross Profit on (Furniture)

Class two (Carpets or whatever sort of  
merchandise is sold)

Form similar to above, arriving at

Gross Profit on (Carpets)

Class three (Similar form for each class  
of merchandise sold)

Total Gross Profit

Deduct:

# MANUFACTURING PROFIT AND LOSS STATEMENT 437

## Gross Profits (Forward)

### Selling Expenses

Salesmen's Salaries . . . .

Salesmen's Traveling Expenses . . . .

Freight and Cartage Out . . .

Advertising . .

Heat, Light and Power (Store) . .

Miscellaneous Selling Expense . .

### Delivery Expenses

Operation Auto Truck . . .

Operation Wagon Truck

Depreciation on Delivery Equipment

### Total Delivery Expenses

Credits and Collections

Depreciation on Store Fixtures

Other Selling Costs

### Total Selling Expenses

### Profit on Selling

### Deduct

### Administrative Expense

Office Salaries

Stationery and Printing

Inventory (Beginning)

Purchases

Total to be accounted for

Deduct Inventory (End)

Stationery and Printing Cost

Miscellaneous Office Expense

Heat, Light and Power (Office)

Depreciation

Building

Office Equipment, etc

Taxes (Office Building)

Insurance (Office Building)

General Administrative Expense

### Total Administrative Expense

### Profits from Operations

**Profits from Operation (Forward)**

Add:	
Other Income	
Interest Earned	...
Discount on Purchases	
(Any other income)	
Total Other Income	—
	---
Total Income	
Deductions from Income	
Interest Expense	.
Discount on Sales	
	-
Total Deductions from Income	
Net Profit for the Period <sup>1</sup>	

**2. Sections of the Statement.** The first section of the manufacturing statement is that having to do with prime cost. This data is perhaps the most important from the standpoint of judging the efficiency of the labor force of a factory. Statistical information made up on the basis of the prime cost figures would show the unit cost of production for the several items of prime cost if the output consisted of a uniform product. There would ordinarily be a specification prime cost or an estimated prime cost which could be compared with the actual cost data taken from the profit and loss statement. The results for the period would indicate the degree of efficiency with which the factory had been operating so far as the direct labor engaged in manufacture is concerned and so far as economy in the purchase and use of material is concerned. There is ordinarily less uniformity in the indirect expenses of a factory than would be found in the direct costs of production. The indirect expenses are likely to vary less with the total output of a factory than would the direct or operating expenses. An estimated cost of factory production, however, would also involve an estimated

<sup>1</sup> The statement may be closed at this point, or it may be followed by the surplus statement showing the distribution of the profit. Sometimes the unusual gains are added and the unusual losses deducted, arriving at the amount which is to be carried to surplus. The surplus statement then shows the distribution of the profits.

indirect expense cost per unit of output, and the indirect or manufacturing expense section would serve the purpose of indicating the extent to which the actual cost had kept within the estimated cost. Likewise each account of manufacturing expense would be subject to estimate and it would be possible to discover by an analysis such as that shown in the statement which of the items of indirect expense had been larger than the estimate or smaller than the estimate. No statement of costs can have great value to one who does not have in mind standard costs with which to compare actual costs.

**3. Standard Costs.** — One of the important functions of factory management is to set up standard costs of production for a factory under supervision. Unless these standard costs can be fairly determined, the management is not efficient. The standard costs are the basis upon which comparison is made with results of a given period. It is more usual to set up estimated costs as a standard of what may be expected than in any former period of industrial production. Estimated costs are after all to a large extent the basis of determining the cost accounts which are to be set up. The estimated costs are consequently becoming a more significant part of the manufacturing statement than in any previous period of factory production. The actual costs of production from period to period are of great importance in making an estimate of the probable costs of production in any future period. Moreover, a reduction in cost in a given period as compared with costs in a preceding period is a favorable indication in regard to the efficiency of a factory. There are consequently two sets of data which are important for the purpose of determining the significance of a statement of factory production. The first of these is a statement of costs in a preceding period and the second is the estimate of cost which was made at the beginning of the period in question. Of course, unit costs are important both in connection with the estimated costs and the actual costs. In fact, the estimate frequently takes the form of an estimated cost per unit in the first instance. The following form, therefore, of a factory statement will be of distinct value as a means of inter-



preting the initial statement made in connection with closing the books for a period.

## ILLUSTRATION NO 36

## VALLEY FURNITURE COMPANY

## MANUFACTURING STATEMENT (COMPARATIVE)

	EST 1920	ACTUAL 1920	PER UNIT	ACTUAL 1919	PER UNIT	ACTUAL INCREASE 1920 OVER 1919	<sup>1</sup> INCREASE PER UNIT
1 Prime Cost							
a Materials Used	\$	\$	\$	\$	\$	\$	\$
b Direct Labor							
Total							
2 Manufacturing Exp							
a Indirect Labor							
b Factory Sup- plies							
c Repairs Fac							
d Heat Light and Power							
e Taxes Factory							
f Depreciative Factory							
g Miscellaneous							
Total							
3 Total Factory Cost	\$	\$	\$	\$	\$	\$	\$

The comparative statement of the trading results of a factory is also important for the same reasons as those referred to in connection with factory production. It would therefore be advisable to make the trading statement on the same basis as that indicated for factory production when a comparative statement is made. A form for the comparative statement might be made as follows:

<sup>1</sup> It is only possible to incorporate the per unit data when the factory is sufficiently specialized so that accounts can be set up on this basis.

# MANUFACTURING PROFIT AND LOSS STATEMENT 441

## COMPARATIVE STATEMENT OF PROFIT AND LOSS OF VALLEY FURNITURE COMPANY

### SHOWING MERCHANDISE SALES

	EST 1920	EST PER UNIT	AC TUAL 1920	AC- TUAL PER UNIT	AC- TUAL 1919	AC TUAL PER UNIT	ACTUAL INCREASE 1920 OVER 1919	1 IN CREASE PER UNIT
1 Net Sales — Carpets	\$		\$		\$		\$	
2 Cost of Goods Sold — Carpets								
3 Gross Profits — Carpets								
4 Net Sales — Chairs								
5 Mfg Cost — Chairs								
6 Gross Profits — Chairs								
7 Net Sales — Furniture								
7 Cost of Goods Sold — Fur								
9 Gross Profits — Fur								
10 Total Gross Profits								
(3) — (6) — (9)								
11 Selling Expenses								
a Salesmen's Salaries								
b Salesmen's Trav Exp								
c Frt and Cartage Out								
d Advertising								
e Heat Light and Power (Store)								
f Del Exp and Frt								
g Del Exp Wagon Frt								
h Deprec on Del Eq								
i Creditors and Collectors								
j Dep on St Fixtures								
k Other Selling Exp								
Total								
12 Profit on Selling								
13 Adm Exp								
a Office Sal								
b Stationery and Printing								
c Heat Light and Power — Office								
d Deprec — (Adm Assets)								
e Taxes — (Adm Assets)								
f Insurance — (Adm Assets)								
Total								
14 Profits from Operation								
15 Other Income								
a Interest Earned								
b Discount on Purchases								
c Miscellaneous								
Total								
16 Total Income								
17 Deductions								
a Int Exp								
b Discount on Sales								
18 Net Profits	\$	\$	\$	\$	\$	\$	\$	\$

1 It might not be feasible to carry the per unit columns unless the sales and expenses could be classified by commodities

**4. General Administration and Cost Data.** — The manufacturing profit and loss statement is of use mainly to the general administrative officers of a business. It has a significance to the subordinate operating officers, but it is more important as a means of control from the standpoint of the officers in charge of the business as a whole. The manufacturing statement is commonly made once each month. The general administrative officers devote their attention more to questions of planning and matters of method, specification costs, and similar general considerations rather than to the detail operating facts of the factory. On the basis of the profit and loss statement, together with a balance sheet, the factory manager or officer in charge of production might estimate what commodities should be produced, and could in addition set up estimated costs of production on the basis of the specifications involved in the given case. This program of production together with estimated costs would be the basis of a program of purchase of raw materials and a program of employment of labor. The general officers of a business charged with the employment of labor and with the purchase of material would be guided in their program of administration by the production estimate made by the officers in charge of production. The officer in charge of financing production must likewise rely in the first instance upon the statement of the financial condition of the business at the beginning of the period and secondly upon the requirements of the program for production that may be adopted. The estimate of the financial requirements connected with any production program has already been discussed in a preceding chapter on the profit and loss statement. One cannot, however possibly understand the significance of the profit and loss statement for a factory unless it is understood that its content must be such as to provide adequate information for the preparation of a general plan of production, the preparation of a general plan of financing, and a general plan of employment. The plan of production, however, must itself be based upon the sales estimate made by the selling organization of a business. The factory might produce goods in accordance with its estimate

and carry out a program completely in every respect except in connection with selling the product of the factory. This one deficiency would defeat the entire aim of the business and the entire aim of factory production. The estimate as to the sales possibilities of a business must be satisfactory before the results of production can be fairly forecasted. The detail of relating the profit and loss statement to the financial requirements of a business would be substantially the same in factory production as in the case of the trading concern discussed in a previous chapter.

**5. Operating Data.** — For operating data officers and foremen of a factory rely rather upon a detail plan of production which is based upon the general plan referred to in the paragraph above. The superintendent of a factory or the assistant superintendent must present a plan of production for each day. This plan involves production orders going to the several departments of the factory and these production orders should set forth both what is to be produced, the specifications for production and the time limits within which production is expected to take place. There will consequently arise certain day to day operating reports in regard to the daily output and the expenditure on direct labor for certain operations, and reports must be made from day to day showing these results so that the work of a succeeding day may be planned and provision may be made for carrying out the general program. If the actual results of operation are not made known from day to day to the operating foreman and officers so that they know substantially how actual results compare with estimated results, there are probably defects in the management of the business. The monthly statement will doubtless show the general results of operations with greater accuracy than they are known by the operating officials prior to the expiration of the month, but the daily and weekly reports to operating executives should be sufficient to enable them to forecast with a fair degree of accuracy the results of operation for the longer period.

**6. Manufacturing Budget.** — The manufacturing budget is a systematic statement of the financial requirements of a factory for a given period. This budget must be based upon a program

of production similar to that referred to in describing the uses of the comparative statement in the paragraph above. The expense accounts found in the revenue statement together with the income accounts with which they are associated, represent the framework for the construction of a budget. If the sales for a period can be estimated with a degree of accuracy the production requirements can then be set up by the management of a factory. The sales program and the production program together will then be the basis of determining the financial requirements for the period concerned. An estimated revenue statement for a period together with a balance sheet at the beginning of the period would serve the financial management of a factory in determining the funds to be required for a given period. The detailed calculation involved would be similar to that discussed in connection with the interpretation of the revenue statement for a trading concern.

**7. Budgetary Accounts.** — In the small business the estimated costs are generally treated as statistical data to be set up in comparison with actual cost data that results from a given period of operation. In the large business, however, it is frequently regarded as desirable to set up the budgetary program in the accounts of the concern. The oil refining business, for example, frequently appropriates for a given period a certain sum of money for a distributing station at a certain point. A journal entry is made of this appropriation in the same way that a journal entry would be made in connection with municipal accounting when an appropriation is made for the operation of the street department. If the distributing station were to be built from accumulated surplus an appropriation therefor might be made by the following journal entries:

a. Station A Fund

Cash

Set aside funds for construction of Station A

b. Surplus

Station A Appropriation

Charging surplus with appropriation  
for construction.

## MANUFACTURING PROFIT AND LOSS STATEMENT 445

If these entries were made the specific appropriation accounts would be subsidiary to the total of appropriations for improvements and additions. As funds were spent they would be charged to the appropriation account. If \$1500.00 were so spent it might be entered as follows:

Station A Appropriation	1,500 00	
Station A Fund		1,500 00

If material for station A account were purchased on time the journal entry would be

Station A Appropriation	_____
Accounts Payable, Station A	_____
(Individual creditor)	

When the account is paid the payment would be charged to accounts payable, station A, and credited to the station A fund. When the job has been finished let us suppose that it cost \$15,000.00 when the appropriation was \$18,000.00. The following entries would be made

Plant and Property, Station A	15,000 00	
Appropriation, Station A	3,000 00	
Surplus		18,000 00
Cash	3,000 00	
Station A Fund		3,000 00

An entry of this form does little more than to set up a fund and a reserve from surplus accumulated to be used for the construction of a distributing station.

### QUESTIONS AND PROBLEMS

- 1 What is the use of the statement of manufacturing costs?
- 2 What is the relation between factory costs and business profits?
- 3 (a) What are the standard costs which are significant in a manufacturing statement?  
(b) What is the relation between standard costs and the usefulness of actual costs?
- 4 Show the relations between the following (a) sales program, (b) production program, (c) financial program
- 5 How would each of these be constructed?

6 From the trial balance and accounts made in connection with exercise data at the end of Chapter XXX make out a manufacturing statement

7 The GX Oil Co appropriated \$25,000 00 for the construction of Station A, January 1, 1921. On January 15 \$5,000 00 of brick were purchased for the job and payrolls for direct labor amounting to \$3,000 00 were paid. January 31 the balance of invoices were paid—materials, \$10,000 00, direct labor, \$5,000 00, indirect expense, \$2,000 00. The work was finished and all necessary entries were made. Journalize the data and show how all accounts stood at the close of the job.

## CHAPTER XXXII

### THE VOUCHER RECORD AND THE ESTIMATING COST SYSTEM

**1. Record of Expenditures.** — The variety of indirect expenses is larger for a factory than for a simple mercantile concern. The four-column purchase journal used in previous chapters would be insufficient to provide for the classification of expenditures involved in even a comparatively small factory. A voucher register is frequently substituted for the purchase journal. An example of such a book of original entry is shown in Illustration No. 37 below.

The transactions illustrated are for an establishment which combines the furniture business with the manufacture of chairs, and will be found in the transactions for May of the Valley Furniture Company at the end of Chapter XXIV. When a voucher record is used, all expenditures are included in it. Even cash outlays are entered in the voucher record prior to their entry in the cash book. The expense classification is provided for in the voucher record so that the detail posting of charges to expense accounts is eliminated in the cash book. The advantage of the many columns provided for in the voucher register is the economy achieved in posting. It is necessary to post only the monthly totals of items charged to the several expense accounts. There is a limit, however, to the number of columns which may be readily used in an expense distribution. A sundry column is consequently provided to take care of those expense accounts which involve a comparatively small number of postings for each account. The form for closing the voucher register and posting the totals of the columns is shown in the illustration (No. 37).

**2. Vouchers.** — The form of a voucher suitable for the voucher register referred to in paragraph 1 is shown in Illustration



tion No. 38. The front of the voucher is used for listing the separate invoices included in a given voucher and for such general descriptive material as may indicate the character of the expenditure. The back of the voucher is ordinarily used for making the distribution of the total expenditure to the separate accounts to be charged. If the factory were in the habit of paying its bills monthly, unpaid bills could be assembled in a file according to firms. At the end of the month the invoices for a given firm could then be vouchered and attached to the face of the voucher. The voucher could then be folded properly and placed in the unpaid voucher file. They are numbered serially and filed in numerical order. They are commonly entered in the voucher register when they have been thus prepared, after having been duly approved for payment by the appropriate officers of the business. At the time payment is made, the original voucher and attached bills are sent to the payee to be receipted and returned. The payment would be entered in the cash book opposite the appropriate check number, and the gross amount of the voucher carried over into the vouchers payable column. The cash discounts could then be treated as they have been in the columnar cash book for the February and March entries. The discount column in the voucher register is used for statistical purposes only. The postings to discount on purchases account and discount on sales account are made from the columnar cash book.

Duplicates of respective vouchers are frequently also filed by the clerk in charge of voucher payments in order to preserve the voucher memorandum for such original vouchers as the payees may fail to return. When the original voucher returns, it is filed in numerical order among the paid vouchers. If the payee does not require for his own purposes the invoices covered by a given voucher, the invoices may be attached to the duplicate voucher and held for reference in the file for duplicate vouchers. This might serve in some instances instead of the detail copy of bills made by business houses.

The management cannot, however, conveniently refer to vouchers by number unless they have an index showing the

voucher numbers for each creditor of the business. Such an alphabetical classification of creditors with numbers of vouchers issued to each will readily take the place of an accounts payable ledger, and make unnecessary all the detail postings to the credit and debit of purchase ledger accounts.

**3. Voucher Checks.** — If a firm wishes to assure the return of the receipted vouchers, it can do so by the use of what is called a voucher check. A voucher check suitable for the firm referred to in Illustration No 38 is shown in Illustration No 39 below. The accounts to be charged are shown on the face of the voucher, and one fold of the back of the voucher serves as a check, while the other fold provides space for endorsements. The voucher check would be treated in the same way as the original voucher referred to above.

ILLUSTRATION NO 37 — VOUCHER REGISTER (Left Page)

Vou No	DATE 1914	NAME	DETAIL	DATE PAID	ACCOUNTS PAYABLE	DISC ON PUR	PURCHASES			LABOR		Opr WAGON TRUCK	Opr AUTO TRUCK
							MATLS	FURN	C'PTS	DIRECT	IN		
1	May	Valley Lbr Co	2/10 n 30	5 14	560 00	11 20	560						
2		Central Leather	" "	5 14	6100 00	122 00	6100						
3		Mich Furn Cpn	" "	5 14	8324 00			8324					
4		Val Cen R R	" "	5 6	625 00								
5		Phila Cpt Co	n 30	5 6	6746 00				6746				
6		Central Supply Co			176 15								
7		Stanley Coal Co			742 00								
8		K C Riley	Pd J E	5 13	175 00								
9		Currency		5 14	2436 50								
					25 881 05	113 20	6 660	8 124	07 16	1 342 60	526 40	27 50	35 00
										1 342 60	526 40	27 50	35 00
		Accounts Payable			25 881 50								

ILLUSTRATION NO 37 — VOUCHER REGISTER (Right Page)

MANUFACTURING EXPENSES				SELLING EXPENSES			GENERAL EXPENSES			FRT - IN	SUNDRY	F GENERAL
RE-PAIRS	H L AND P	FAC	SLP	M F E	SLSMN SALS	TRAV EXP	ADV MISC	OFF SALS	STA AND PRG	MISC EXP		
170.45	742										Freight Out	41 140.00
	65				260			180			Office Equip	15 175.00
176.45	807				260			180				
											Material	36 660.00
											Furniture	37 834.00
											Carpets	38 6740.00
											Direct Labor	40 1342.60
											Indirect Labor	40 526.40
											Opr Wagon T	41 27.50
											Opr Auto T	41 35.00
											Repairs	42 176.43
											H L and P	42 807.00
											Salesmen's Sals	44 260.00
											Office Salaries	44 180.00
											Freight-In	46 485.00
											General	46 315.00
												21 25 884.05

(1) (2) (3) (4) (5) (6) (7) (8) (9)



## ILLUSTRATION NO 38 (BACK)

CHECK NO

VOUCHER NO

Date \_\_\_\_\_, 19\_\_\_\_

AMOUNT \$

Name

### ACCOUNTS TO BE CHARGED

Purchases		
Material		
Furniture		
Carpets		
Labor		
Direct		
Indirect		
Operation of Wagon Truck		
Operation of Auto Truck		
Mfg Expense		
Repairs		
Heat, Light, and Power		
Factory Supplies		
Misc Factory Expense		
Selling Expenses		
Salesmen's Salaries		
Traveling Expenses		
Advertising		
Misc Selling Expense		
General Expenses		
Office Salaries		
Stationery and Printing		
Misc Expense		
Freight-In		

## ILLUSTRATION NO 39 — VOUCHER CHECK (FRONT)

THE VALLEY FURNITURE COMPANY  
 TO \_\_\_\_\_ DR  
 Valley, Ill., \_\_\_\_\_, 19\_\_.

ACCOUNTS TO BE CHARGED		DATE OF INVOICE	PARTICULARS	AMOUNT
Purchases				
Material	.			
Furniture	.			
Carpets	.			
Labor	.			
Direct	.			
Indirect	.			
Operation Wagon Truck	.			
Operation Auto Truck	.			
Manufacturing Expense	.			
Repairs	.			
Heat, Light, and Power, etc	.			
Selling Expenses	.			
Salesmen's Salaries, etc	.			
General Expenses	.			
Office Salaries, etc	.			
Freight-In	.			

## ILLUSTRATION NO 39 (BACK)

VOUCHER CHECK NO _____	
MAKE ENDORSEMENTS HERE	
<p style="text-align: center;">THE VALLEY FURNITURE COMPANY</p> <p style="text-align: center;">Voucher Check No _____ Valley, Ill, _____, 19____</p>	
Pay to the Order of _____	\$ _____
Dollars	
TO VALLEY NATIONAL BANK VALLEY, ILL	<p style="text-align: center;">THE VALLEY FURNITURE COMPANY</p> <p>By _____ Treasurer</p>



**4. Voucher Register and the Purchase Ledger.** — Since the voucher index and the voucher file take the place of a purchase ledger, the question arises as to the disposition of the accounts payable already entered on the subsidiary purchase ledger. It will be necessary to issue vouchers covering the unpaid balance of each of these accounts and enter these vouchers in the voucher register. It will not be necessary to charge the merchandise purchases account or the expense accounts, as these will have been charged in connection with the original entries. In entering the vouchers an account of vouchers payable is automatically credited because the items go into the vouchers payable column. In order, therefore, properly to allow for this change the following journal entry is required

Accounts Payable (old account)

John Doe

Richard Roe

Vouchers Payable (new account)

This entry will serve to close the old accounts payable account and at the same time open the new vouchers payable account. The subsidiary debits to John Doe, Richard Roe, etc., merely serve to close the subsidiary accounts payable in the purchase ledger at the same time the accounts payable controlling account is closed in the general ledger. After entering the initial vouchers in the voucher register, it is only necessary to enter in the sundry account column the debit to accounts payable and no entry in the general journal is then necessary.

**5. Goods in Process.** — If one relies on the voucher register alone for cost records, no accurate statement can be made in regard to work in process. The amount of work in process is entirely a question of inventory determination, as set forth in a preceding chapter. Moreover, one cannot estimate accurately the amount of labor which has been spent on materials that are partly finished. It is not so difficult to determine by inspection the amount of materials involved in work in process. If the amount of expenditure for labor and indirect expense is to be determined, one must analyze the productive process involved into operations so that a given amount of wage expenditure

with a corresponding amount of indirect expense may be assigned to unfinished stock in the various stages of completion. In the final stages of costing one must after all rely largely upon estimates of cost rather than upon actual cost records.

**6. Limitations of the Voucher Register.** — If indirect labor and indirect expense were a comparatively small fraction of the total cost of a given product, the voucher record distribution might be relied upon to produce results sufficiently accurate for managerial use, but for the more involved types of manufacture such a cost accounting program would be unsatisfactory.

## CHAPTER XXXIII

### OPENING THE CORPORATION BOOKS FOR APRIL TRANSACTIONS

**1. Organization of Corporation.** — The Valley Furniture Co is incorporated under the laws of the State of Illinois with a capital stock of \$150,000 00, divided into 1500 shares of the par value of \$100.00 each. The subscription list is as follows:

Frank Williams	400 shares
Walter Day	345 shares
John Sykes	100 shares
Howard Andrews	322 shares
Clyde Atkins	100 shares
John Robbins	100 shares
Henry Moran	90 shares
George Galloway	43 shares

In a large corporation it would be necessary to open a subscription ledger which would be subsidiary to the controlling account of subscribers in the general ledger. In small corporations with few subscribers the subscription record could easily be kept by memorandum, the details of subscriptions and payments being entered in the general ledger account with subscribers. For purpose of practice in keeping the subsidiary ledger, a subscribers' ledger should be opened in this set. In the journal the outside columns formerly used for accounts payable should be headed Subscribers, and in the cash book the column formerly used for cash sales should be headed Subscribers. When the subscriptions have all been paid, all accounts in the subscribers' ledger and the controlling account with subscribers in the general ledger will be in balance.

At the first meeting of the stockholders Frank Williams, Walter Day, John Sykes, Howard Andrews, and Clyde Atkins are elected directors. At the meeting of the directors Frank

Williams is elected President, Howard Andrews Vice-president, with the duty of managing the factory, and Walter Day, Secretary-Treasurer of the corporation.

At the first meeting of the stockholders Williams and Day present the balance sheet of their business as of March 31.

At the same meeting an agreement to purchase certain assets from Howard Andrews is confirmed. Howard Andrews owns a completely equipped chair factory. The corporation purchases this factory at an appraised value as follows

Land	12,500 00
Buildings	22,000 00
Tools and Machinery	12,000 00
Factory Fixtures	700 00

The land and buildings are subject to a mortgage in favor of the Valley Trust Co. of \$15,000 payable March 31, 1916, with interest at 6 per cent, payable annually on March 31.

At the same time an agreement to purchase a patent on a type of rocking chair which it is proposed to manufacture is confirmed. The patent is owned by Clyde Atkins and has 10 years yet to run. The purchase price is \$10,000 00.

It is necessary to keep a stock ledger to show the amount of stock held by each shareholder. No individual accounts are kept with shareholders in the general ledger, but the capital stock account serves as a controlling account of the stock ledger. The form of the stock ledgers is specially ruled to provide space for information that may be required, but the standard form of ledger account can be easily made to serve the purpose. The form of the stock ledger may be taken from Illustration No. 32.

When the certificates of stock have been issued by the secretary as indicated above, the proper entries are made directly in the stock ledger.

**2. Schedule of Accounts.** — After the entries necessary to record these opening transactions have been made, they should be posted. For convenience the list of ledger accounts to be kept is given below.

## A. Assets

## AC. Current Assets

- AC<sub>1</sub> Valley National Bank
- AC<sub>2</sub> Petty Cash
- AC<sub>3</sub> Notes Receivable
  - AC<sub>3 1</sub> Notes Receivable Discounted
- AC<sub>4</sub> Accounts Receivable
  - AC<sub>4 1</sub> Reserve for Bad Debts
- AC<sub>5</sub> Furniture Inventory
- AC<sub>6</sub> Carpet Inventory
- AC<sub>7</sub> Material Inventory
- AC<sub>8</sub> Accrued Interest Receivable
- AC<sub>9</sub> Scrap

## AW Working Assets

- AW<sub>1</sub> Factory Supplies
- AW<sub>2</sub> Notes Receivable Stock Subscriptions
- AW<sub>3</sub> Subscribers
- AW<sub>4</sub> Deferred Expense
- AW<sub>5</sub> Advance to Salesmen

## AF. Fixed Assets

- AF<sub>1</sub> Store Fixtures
  - AF<sub>1 1</sub> Depreciation Reserve Store Fixtures
- AF<sub>2</sub> Office Equipment
  - AF<sub>2 1</sub> Depreciation Reserve Equipment
- AF<sub>3</sub> Factory Fixtures
  - AF<sub>3 1</sub> Depreciation Res Factory Fixtures
- AF<sub>5</sub> Machinery and Tools
  - AF<sub>5 1</sub> Depreciation Res Mach and Tools
- AF<sub>6</sub> Delivery Equipment
  - AF<sub>6 1</sub> Depreciation Res Del Equipment
- AF<sub>7</sub> Building — Factory
  - AF<sub>7 1</sub> Depreciation Res Factory Building
- AF<sub>8</sub> Building — Office
  - AF<sub>8 1</sub> Depreciation Res Office Building
- AF<sub>9</sub> Land
- AF<sub>10</sub> Patents
- AF<sub>11</sub> Goodwill

## L Liabilities

## LC Current Liabilities

- LC<sub>1</sub> Notes Payable
- LC<sub>2</sub> Vouchers Payable
- LC<sub>3</sub> Accounts Payable
- LC<sub>4</sub> Accrued Interest Payable

## LD Deferred Income

LF Fixed Liabilities

LF<sub>1</sub> Mortgage Payable

P Proprietorship

PC Capital Stock

PC<sub>1</sub> Unissued Stock

PS Surplus

E Expense Accounts

EF. Factory Expenses

EF<sub>1</sub> Material Purchases

EF<sub>2</sub> Frt and Cartage In — Material Purchased

EF<sub>3</sub> Direct Labor

EF<sub>4</sub> Indirect Labor

EF<sub>5</sub> Repairs — Factory Building and Machinery

EF<sub>6</sub> Heat, Light and Power

EF<sub>7</sub> Factory Supplies

EF<sub>8</sub> Miscellaneous Factory Expense

EF<sub>9</sub> Depreciation — Factory

ET Trading Expense

ETP Purchases

ETP<sub>1</sub> Furniture Purchases

ETP<sub>1 1</sub> Furn Purchases — Re-  
turns and Allowances

ETP<sub>2</sub> Carpet Purchases

ETP<sub>2 1</sub> Carpet Purchases — Re-  
turns and Allowances

ETP<sub>3</sub>. Frt and Cartage In — Purchases

ES. Selling Expenses

ES<sub>1</sub> Operation of Auto Truck

ES<sub>2</sub> Operation of Wagon Truck

ES<sub>3</sub> Advertising

ES<sub>4</sub> Salesmen's Traveling Expenses

ES<sub>5</sub> Salesmen's Salaries

ES<sub>6</sub> Depreciation on Delivery Equipment

ED Administrative Expense

ED<sub>1</sub> Office Salaries

ED<sub>2</sub> Stationery and Printing

ED<sub>3</sub> Miscellaneous Adm Expense

EG. General Expense

EG<sub>1</sub> Interest Expense

EG<sub>2</sub> Discount

EG<sub>3</sub>. Depreciation on Store Fixtures

EG<sub>4</sub> Insurance

EG<sub>5</sub> Miscellaneous General Expense

**R Revenues****RS. Sales****RS<sub>1</sub>. Furniture Sales**

**RS<sub>1</sub> 1 Furniture Sales — Returns and Allowances**

**RS<sub>2</sub> Carpet Sales**

**RS<sub>2</sub> 1 Carpet Sales — Returns and Allowances**

**RS<sub>3</sub>. Chair Sales**

**RS<sub>3</sub> 1 Chair Sales — Returns and Allowances**

**RN Other Income**

**RN<sub>1</sub> Interest Income**

**RN<sub>2</sub> Discount on Purchases**

**C Closing Accounts**

**C<sub>1</sub> Manufacturing**

**C<sub>2</sub> Trading**

**C<sub>3</sub> Selling**

**C<sub>4</sub> Profit and Loss**

**3. Opening the Voucher Register.** — The important change in the books kept in this business is the substitution of the voucher register for the purchase register. Instead of entering all bills for merchandise purchased in the purchase register, vouchers are drawn covering these bills and also all other bills of whatever description, and these vouchers are entered in the voucher register. Expense items which were formerly entered in the journal may now be entered in the voucher register.

The headings of the columns in the voucher register are as follows:

**1 Voucher Number**

**2 Date**

**3 Name**

**4 Detail**

**5 Date Paid**

**Money Column Number:**

**1 Accounts Payable**

**2. Discount on Purchases**

**3-4-5 General Heading — Purchases**

**3 Material**

**4. Furniture**

**5. Carpets**

6-7	General Heading — Labor
6	Direct
7	Indirect
8	Operation Wagon Truck
9	Operation Auto Truck
10-13	General Heading — Manufacturing Expense:
10	Repairs
11	Heat, Light and Power
12	Factory Supplies
13	Miscellaneous Factory Expense
14-17	General Heading — Selling Expenses
14	Salesmen's Salaries
15	Traveling Expenses
16	Advertising
17	Miscellaneous Selling Expenses
18-20	General Heading — General Expenses
18	Office Salaries
19	Stationery and Printing
20	Miscellaneous Expenses
21	Freight-In
	Explanation Column · Sundry Accounts
	Folio Column
	Final Money Column    General

**4. The Books of the Valley Furniture Co. Transactions for April, 1914.** — All accounts which should be kept in the general ledger for this month are listed in Chapter XXIV Use this list of accounts only Keep the sales ledger and the subscribers' ledger posted up to date Continue the note registers Draw vouchers for all outstanding accounts payable.

April 2 A call is made for 50 per cent of the subscription to stock. John Robbins and Henry Moran send in checks George Galloway gives his note at 15 days with interest at 6 per cent

A contract is made with Soars, Roduck & Co of Chicago to take the entire output of the chair factory upon terms designated in the contract

A three-year insurance policy is taken out to cover the factory buildings, equipment, and materials for \$23,000 00 at a cost of \$738 25, Voucher #1 is made out to the Brown Bros Agency for this amount, and the voucher is paid at once. (Charge insurance in the Sundry column.)

Lumber costing \$2,800 00 is purchased from the Valley Mills;



terms, regular (Regular means in this business 2/10 net 30)  
Voucher #2, charge materials

The special series vouchers made for outstanding accounts payable are paid

April 3 Leather costing \$1,200 00 is purchased from the Borch Tannery, terms, regular (Voucher #3, charge materials)

Miscellaneous materials are purchased from the Marshall-Wallace Hardware Co for \$750 00 Terms n/30 (Voucher #4)

Machinery is purchased from the United Machine Shops for \$4,200 00 Terms, n/10 (Voucher #5, charge machinery, etc, in Sundry column)

April 4 Bought for cash from the Power House Supply Co (Voucher #6)

Oil and Waste for Engine Room	24 30
Supplies for Shop	18 75
Supplies for office	18 20

Paid the Corner Book Store (Voucher #7) for the following

Record Blanks for Office	27 30
Time Cards, Etc, for Factory	8 25
Stationery for Salesmen	11 40

Received on account the following

Bismarck Hotel	100 00
H R Scott	73 40
A M Mastin	163 80

Cash sales were made as follows

Carpets	126 00
Furniture	214 50

(Note In this month cash sales will be entered in the cash book, general column only No entry is made in sales register which is now for credit sales only Posting is direct from cash book to the sales accounts)

April 5 Advanced to Donald Horne \$100 00 (Voucher #8) and to Blaine Harris \$125 00 (Voucher #9), these amounts to be used by them as advances from which to pay their expenses as traveling salesmen

Paid in cash (Voucher #10) a bill of the Power House Supply Co, for \$189 40 for overhauling the machinery preparatory to starting the plant (This item should be charged to machinery)

Received bill of the Valley Press (Voucher #11) for \$397 00 for printing catalogue. The bill is not paid at this time

April 6 Purchases as follows.

# OPENING THE CORPORATION BOOKS FOR APRIL 465

Haywood Furniture Co. — Furniture	3,250 00
Terms, regular (Voucher #12)	
Wilson Carpet Co — Carpets	1,728 00
Terms, regular (Voucher #13)	

## Receipts on account

Martindale Furniture Co	325 00
K C Riley	25 00
J Collins	75 00
H. P Square Business College	50 00

## Sales on account

Fulton Furniture Co — Furniture	500 00
Carpets	300 00
Terms, regular	
Randolph Furniture Co — Furniture	325 00
Carpets	700 00

## Terms, regular

April 7 Purchased from Furniture Emporium furniture, \$1,200 00, carpets, \$2,250 00, terms, regular (Voucher #14)

Receipts on account Smith Institute, check for \$980 00, dis \$20 00

Paid the Valley Central (Voucher #15) \$315 00 freight on machinery purchased April 3 (charge to machinery)

Paid the Valley Press \$200 00 (Voucher #16) for advertising to be run during April

April 9 Bought sundry materials from the Mahin Leather Supply Co amounting to \$2,543 00 Terms, regular (Voucher #17)

Paid the note of Limbert & Gray Furniture Co of \$1,800 00 with interest of \$24 00 (Voucher #18)

Voucher #11 in favor of the Valley Press is paid

Voucher #19 is drawn in favor of James Blackwell, the cashier, for \$57 40 to replace money expended from the petty cash fund as follows

Shop Supplies	4 20
Miscellaneous Factory Expense	2 60
Advertising	3 00
Stationery and Printing	5 00
Miscellaneous Office Expense	12 45
Operation Auto Truck	17 75
Operation Wagon Truck	12 40

57.40

The voucher is immediately paid

Purchased from the Stanley Coal Co (Voucher #20) 100 tons coal at \$5.75 The bill is not paid at this time

H R Scott pays his note of \$428 00 due today, with interest of \$5 71.

Receipts on account

Randolph Furniture Co — check	1,176 00
discount	24 00
Foster Hall — check	784 00
discount	16 00

April 11 Voucher #2 in favor of the Valley Mills is paid Face of voucher, \$2,800 00, discount, \$56 00

The United Machine Shops are paid \$178 49 (Voucher #21) for labor in installing machinery purchased on April 3 (Is installation of machinery a part of cost of machinery?)

April 12 Pay Voucher #3 in favor of the Borch Tannery for \$1,200 00, less discount of \$24 00

Pay Voucher #5 in favor of the United Machine Shops for \$4,200 00

Draw and pay Voucher #22 in favor of the Valley Central R R or \$176 75, Freight-In on purchases to date

April 13 Collections on account

Fulton Furniture Co	850 00
St Luke's Hospital	760 00

The first shipment of chairs is made to the Soars-Roduck Co, 200 chairs are sent them invoiced at \$10 25 each, terms 2/20, net 30

April 14 Cash sales furniture, \$476 00, carpets, \$327 00

Credit Sales

J H Brigham furniture, \$420 00, carpets, \$271 00, terms regular

A W Martin furniture, \$625 00, carpets, \$1030 00, terms regular

H R Scott furniture, \$460 00, carpets, \$320 00, terms regular

A cash refund is made to John Smith (Voucher #23) for a defect in a carpet bought for cash, \$25 00

April 15 The semi-monthly payroll is paid by a check to Currency (Voucher #24) The voucher shows the following distribution

Direct Labor	1,037 40
Indirect Labor	483 00
Heat, Light and Power	65 00
Salesmen's Salaries	170 00
Office Salaries	256 00
Operation Auto Truck	35 00
Operation Wagon Truck	27 50

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2,073 90

April 16 The George Gallaway note for \$2,150 00 taken for stock subscription is paid today through the bank with interest of \$5 38.

Vouchers #s 12 and 13 in favor of the Haywood Furniture Co and the Wilson Carpet Co are paid, the discount being taken.

Collections on account

Randolph Furniture Co , check, \$1,004 50, discount, \$20 50.

Fulton Furniture Co , check, \$784 00, discount, \$16 00

April 18 To meet current obligations, a temporary loan is made at the Valley National Bank of \$4,000 00 for 30 days, bank discount of \$26 67 being deducted in advance

Voucher #14 in favor of the Furniture Emporium is paid, discount \$63 00

Voucher #25 is drawn in favor of the Power House Supply Co for repairs to machinery amounting to \$41 23 The voucher is not paid.

Purchased materials amounting to \$2,900 00 from the Valley Mills Terms, regular (Voucher #26 )

April 19 Cash sales furniture, \$425 00, carpets, \$231 00

Voucher #17 in favor of the Mahin Leather Co is paid, discount \$50 86

Voucher #27 is drawn and paid to the Central Garage for automobile supplies, \$31 50

April 20 Collections on account: Newsome Furniture Co , \$1,500 00

The Valley National Bank notifies the Valley Furniture Co that the Martindale Furniture Co note due today has been paid

April 21 Credit Sales

J H Bringham furn , \$ 425 00, carpets, \$380 00, terms, reg

Randolph Furn Co furn , 1,840 00, carpets, 760 00, terms, reg

Fulton Furn Co furn , 1,200 00, carpets, 675 00, terms, reg.

Newsome Furn Co furn , 950 00, carpets, 780.00, terms, reg

April 23 Purchased from the Central Furniture Co , terms regular

furniture, \$2,640 00, carpets, \$1,230 00 (Voucher #28)

The Bismarck Hotel has gone into bankruptcy The amount due \$250 00, is charged to Frank Williams, who guaranteed the accounts receivable transferred to the corporation by Williams and Day

Collections on account:

H R Scott check, \$ 764 40, discount, \$15.60

A W Martin check, 1,621 90; discount, 33 10

April 25 Voucher #29 is drawn and paid to R L White for expenses incurred in and fees for, defending suit for infringement of patent rights, \$100.00 (charge to patents)

Voucher #30 is drawn in favor of the Smithson Contract Co. for \$1,335 00 for grading the factory grounds and laying out drives and walks (Is this an expense or an addition to assets?)

April 27 Credit Sales

A W Martin	furniture, \$ 490 00, carpets, \$300 00; terms, reg.
H R Scott	furniture, 1,010 00, carpets, 460 00, terms, reg
K. C Riley	furniture, 1,725 00, carpets, 760 00, terms, reg

April 28 The Valley Mills is willing to allow the discount on Voucher #26 if payment is made by a note of the corporation A note payable in 30 days with interest at 6 per cent is given for the net amount of the voucher (Mark the voucher "Paid by journal entry," referring to page on which the entry is made, and make the necessary entry in the journal)

Purchased from the Borch Tannery materials amounting to \$2,160 00 Terms, n/30 (Voucher #31)

Voucher #32 is drawn and paid to James Blackwell, the cashier, for payments from petty cash as follows.

Shop Supplies	22 00
Miscellaneous Factory Expense	10 00
Advertising	3 20
Miscellaneous Selling Expense	2 10
Stationery and Printing	14 75
Miscellaneous Office Expense	7 30
Operation Wagon Truck	21 70
	<hr/>
	81 05

A second shipment of chairs to the Soars-Roduck Co is made, 680 chairs being sent, billed as before

Allowance is made for damage to the goods sold to H R Scott on the 27th furniture, \$16 00, carpets, \$23 00

April 30 Voucher #35 to currency covers the semi-monthly payroll as follows

Direct Labor	1,140 00
Indirect Labor	652 00
Repairs	25 00
Salesmen's Salaries	170 00
Operation Auto Truck	35 00
Office Salaries	266 00
Operation Wagon Truck	27 50
	<hr/>
	2,315.50

The following vouchers are drawn and paid

Donald Horne, salesmen's salaries, \$125 00, expenses, \$87.00; (Voucher #34)

Blaine Harris, salesmen's salaries, \$110 00, expenses, \$82 50 (Voucher #35)

Frank Williams, salary as general manager, \$200 00 (Voucher #36.)

**5. The Record of April Transactions.** — After entering the April transactions the student should close the books of original entry first with pencil closings. Then the trial balance for the April transactions should be taken. After the transactions are checked and a correct trial balance is found the additional entries should be made from the succeeding paragraph.

**6. Additional Summary Entries.** — To provide material upon which to base a yearly closing for the business of the Valley Furniture Co. without making necessary routine detailed entries for the whole period the transactions between May 1, 1915, and March 31, 1916, are given below in total. Enter these totals properly in the books of the Valley Furniture Co., post them, and take a trial balance as of March 31, 1916.

#### VOUCHER RECORD

Material Purchased	64,243 00	Salesmen's Trav Exp	1,468 40
Furniture Purchased	70,314 00	Misc Selling Exp	726 35
Carpets Purchased	48,372 00	Advertising	2,475 20
Freight In	4,367 45	Freight Out	675 28
Direct Labor	33,460 45	Office Salaries	8,342 00
Indirect Labor	13,748 00	Stationery and Printing	543 95
Repairs to Machinery	1,136 27	Misc Office Exp	150 30
Heat, Light and Power	6,358 70	Taxes	1,340 54
Factory Supplies	1,428 40	Interest	1,143 27
Misc Factory Exp	162 36	Notes Payable	24,360 00
Operation Auto Truck	954 85	Advances to Salesmen	200 00
Operation Wagon Truck	746 63	Salesmen's Salaries	5,640 00
The total credit to accounts payable is \$292,358 30			

#### SALES RETURNS AND ALLOWANCES

##### SALES REGISTER

Furniture Sales	106,342 50	Furniture	1,100.60
Carpet Sales	78,221 40	Carpets	627 30
Chair Sales	126,347.29	Chairs	1,225 65

## JOURNAL

Accts Rec , \$17,268 40 are paid by notes  
 Notes Rec Disc , \$500 00 have matured without protest.  
 Bad Debts amounting to \$251 00 are charged off.

## CASH BOOK DEBITS

Collection of Accts Rec \$276,543 20, less disc on sales \$2,821 43  
 Notes Rec paid up, \$13,436 40, and from int \$740 00  
 Notes Rec Disc \$1,310 00 less int of \$35.00  
 Notes Pay \$25,400 00 less int of \$325 30

## CASH BOOK CREDITS

Accts Pay paid \$285,362 40, less disc on pur of \$3,294 63

**7. Data for Annual Closing.** — A Adjustments prior to closing.

(a) *Depreciation.* — Allow annual depreciation on store building of 5 per cent and on factory of 6 per cent. Allow annual depreciation on machinery and tools of 8 per cent. The depreciation on these classes of assets should be shown in the reserve accounts which have already been provided for. Write down the value of factory fixtures, store fixtures, and office equipment 10 per cent for depreciation, and the value of the delivery equipment 20 per cent for depreciation.

(b) *Interest Items* — Any accrued interest on notes receivable or accrued interest on notes payable which was found on the books at the beginning of the period should be closed out by the usual reversing entry if it was not done at the beginning of the period.

(c) Accrued interest on notes receivable at the end of the year was \$174.50. Place this item on the books. Interest paid in advance on notes payable amounted to \$45 00.

(d) *Payroll Payable* — There was direct labor accrued of \$795 40, indirect labor of \$286 79, and engineers' and firemen's salaries of \$24 00. (Open payroll payable on page 58.)

B. Closing entries:

(1) Manufacturing costs are shown in the manufacturing account. This account is debited with all costs of manufacturing and credited with all off-sets, so that when all entries have been made, the balance in the account represents the cost of manufacturing the goods which have been made during the period. The first items to be shown in this account are the elements of prime cost, materials and direct labor. The cost of materials used in manufacturing is, of course, the inventory of materials at the beginning of the period plus the purchases, less the inventory at the end.

The adjustments for inventory can be made either in material purchases or in manufacturing. The first entry made is that to transfer to material purchases the proportionate cost of the freight on materials purchased. Three eighths of the freight-in is to be charged to materials. The inventory of materials is \$12,000.

The next step is to close into manufacturing all other costs. The elements of manufacturing costs in addition to prime cost which are found in this business include indirect labor, used for factory operation, factory supplies, miscellaneous factory expense, depreciation on factory and equipment, taxes and insurance on factory and equipment. Some of these items can be transferred directly to manufacturing. Others require adjustment. There is an inventory of factory supplies of \$325 00. (Adjust the account to show the cost of factory supplies consumed before closing it into manufacturing.) Three fourths of the cost of heat, light and power was for the factory. The depreciation on factory building, machinery and tools, and factory fixtures is chargeable to manufacturing. One half of the taxes was for the factory equipment and materials. The insurance *expired* during the year was \$434 60, of which one half was insurance on the factory and contents. (The simplest method of booking this cost is by debiting manufacturing and crediting insurance with the proper amount.) Patents should be written down one tenth, as their value has decreased by at least that amount. This decrease in the value of patents is a manufacturing expense.



The final step is to make the adjustment in manufacturing for the goods in process so that the account will show the cost of the actual goods completed. This adjustment is made by transferring any inventory of goods in process at the beginning of the period to manufacturing (in this case there was no such inventory since the factory began operations at the beginning of the period) and placing the new inventory of goods in process on the books. This inventory was \$10,290.00. The Manufacturing account now shows the cost of the goods which have been manufactured.

(2) To determine gross profits

The gross profits are to be determined on each class of merchandise sold. To determine the gross profits on chairs it is necessary to show first the cost of manufacturing the chairs. The cost of manufacturing has been determined in manufacturing. An entry transferring this cost from manufacturing to trading is necessary. The principal credit is of course the chair sales, and this account, after adjustment for returns, is closed into trading. When the account is adjusted for the inventories, the gross profit on chair sales can be found. There was no inventory of chairs at the beginning of the period, but at the end there was an inventory of finished product, chairs, of \$9,980.00. In order that the gross profit may be shown clearly, the trading account should be balanced at this point and the gross profit on chair sales brought down. The gross profit on furniture sales and carpet sales is to be determined in separate trading accounts.

One fourth of the freight-in is to be charged to carpet purchases and three eighths to furniture purchases. The inventory of carpets at the end of the year was \$30,000.00 and of furniture, \$59,000.00. The trading account now shows the gross profit on all classes of goods sold.

(3) *Selling Costs* — A *selling* account is sometimes opened either as a separate closing account or as a section of the profit and loss account. It may be opened as a separate account. The gross profits from the trading accounts would be brought down to the credit of the *selling* account by journal entry. All

the expense accounts classified under selling expenses in the schedule of accounts would then be closed into *selling* by journal entry

In this business the selling costs are the proportionate amount of heat, light, and power used in the store, which was one eighth of the total amount, the operation of the auto truck, the operation of the wagon truck, the depreciation on delivery equipment (remember that during the year a charge was made to depreciation on some delivery equipment, which must be added to the depreciation allowed at the end of the year) the depreciation on store fixtures, salesmen's salaries, salesmen's traveling expenses, miscellaneous selling expense, freight and cartage out, and advertising \$275 00 of the advertising expenditure is to be treated as a deferred charge The balance in *selling* now shows the profit on selling before the general expenses of the business are deducted

(4) *Determining the Net Profit* — The net profit on selling is then transferred to profit and loss, in which account the various general expenses of the business are deducted These general expenses include office salaries, stationery and printing (before closing this account must be adjusted for an inventory of \$25 00 of office supplies on hand), miscellaneous office expense, depreciation on store building and on office equipment, one eighth of the total cost of heat, light, and power, and one half of the taxes and one half of the insurance The balance in profit and loss at this point is the net profit from operations The account should be balanced and the net profits from operation shown. To this net profit from operations is to be added the secondary income, and the deductions from income are the discount accounts A reserve for uncollectible accounts is to be set up by debiting profit and loss and crediting *reserve for bad debts* Allow \$750 00 for this item. Against this reserve charge the uncollectible accounts as they are marked off.

The balance in profit and loss now shows the net profit for the year. The accounts are now in such condition that the final statements can easily be made \*

(5) *Form for a Sectionalized Profit and Loss Account.* — The

student will readily see just what journal entries are made from the following form for a sectionalized profit and loss

## ILLUSTRATION NO 40

PROFIT AND LOSS (*Sectionalized*)

Operation of Auto Truck	Gross Profits (down)
Operation of Wagon Truck	
Advertising	
Salesmen's Trav Expense	
Salesmen's Salaries	
Depreciation on Delivery Equipment	
Net Profit on Selling	—
Office Salaries	Net Profits on Selling (down)
Stationery and Printing	
Depreciation on Stores and Fixtures	
Insurance	
Misc General Expense	
Net Profit from Operation	—
Discount on Sales	Net Profits from Operation (down)
Interest Expense	
Net Profits	Interest Income
	Discount on Purchases

## APPENDIX

### THE WORKING SHEET

**1. The Purpose of the Working Sheet.** — When the closing is made by journal entry, the whole process involves several accounts, the balance sheet, and revenue statement. The accountant frequently wishes to bring all of these together on the same page, for the purpose of working out the data in the first instance prior to placing it on the ledger. The old elementary text furnished for this purpose what was called the six-column statement. This statement had in it the following columns: (a) Trial balance debits, (b) Trial balance credits, (c) Profit and loss debits, (d) Profit and loss credits, (e) Balance sheet assets, (f) Balance sheet liabilities. The working sheet takes all of these columns and adds two more for the purpose of taking care of such adjustments as are needed in connection with making the final entries involved in drawing off a revenue statement and balance sheet. The form below will show the headings for the working sheet.

**2. Entries on the Working Sheet.** — The new accounts involved in taking off the working sheet are entered ordinarily directly under those which would be used in making the trial balance. Instead of entering these items in the trial balance columns, however, the new account entries are placed in the adjustment column. The letter placed to the left of each entry refers to the list of items involved in the adjustments. These items appear below. After the adjustment items are properly entered and carried over into the profit and loss column or the balance sheet column, as may be required, it is then possible to calculate the net profits which are entered in the left column of the profit and loss column. With this new net profit the capital account or total net profit accumulated may be changed to correspond with the final total. The two columns of the balance sheet should then balance if the work has been correct.

**3. The Working Sheet and the Statement.** — The working sheet is not the final form in which the statements are commonly left. It is only preliminary and is merely an aid to the accountant in bringing the data together. When the profit and loss items and the balance sheet items have been thus assembled it is a simple matter to draw off the revenue statement and balance sheet in the form most suitable for comprehension by the ordinary manager or stockholder who may not be acquainted with accounting terminology.

**4. Adjusting Entries.** — The adjusting entries used in the working sheet are as follows

- a* Merchandise inventory end of the period, \$10,200 00
- b* Accrued taxes, \$150 00
- c* Reserve for bad debts, \$180 00
- d* Reserve for depreciation on furniture and fixtures, \$100 00
- e* Interest accrued on notes receivable, \$50 00
- f* Selling salaries accrued, \$200 00.
- g* Administrative salaries accrued, \$250 00.

JOHN DOE  
WORKING SHEET FOR PERIOD OF THREE MONTHS ENDED DECEMBER 31, 1920

	TRIAL BALANCE		ADJUSTMENTS		PROFIT AND LOSS		BALANCE SHEET	
	Debits	Credits	Debits	Credits	Losses	Profits	Assets	Liabilities
Cash	3 000 00						3 000 00	
Notes Receivable	1 200 00						1 200 00	
Accounts Receivable	8 000 00						8 000 00	
Fixtures	2 000 00						2 000 00	
Buildings	5 000 00						5 000 00	
Notes Payable		5 000 00						5 000 00
Accounts Payable		20 000 00						20 000 00
Merchandise Inventory	5 000 00							
Merchandise Purchases	20 500 00							
Merchandise Sales								
Administrative Salaries			2 500 00					
Selling Salaries	1 000 00							
Administrative Expense	1 500 00							
Selling Expenses	1 500 00							
Discount on Sales	500 00							
Interest Expense	350 00							
Commission	150 00							
John Doe Per	1 000 00							
John Doe Cap	1 800 00							
Taxes		7 500 00						
Reserve for Bad Debts								
Reserve for Depreciation on Fixtures								
Accrued Accounts Receivable — Interest								
Accrued Accounts Payable — Taxes								
Accrued Accounts Payable — Selling Salaries								
Accrued Accounts Payable — Adm Salaries								
Interest Income								
Net Profit								
Total	55 500 00	55 500 00	12 930 00	12 930 00	23 030 00	23 050 00	32 450 00	32 450 00



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